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NEWSLETTER

OF THE

O F F I C E O F G R A I N I N V E S T I G A T I O N S

BUREAU OF PLANT INDUSTRY

U. S DEPARTMENT OF AGRICULTURE

APR 6 1912

Volume IV

1912.

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With this number begins our fourth annual "Newsletter" which we trust may prove of interest as in the past.

April 6, 1912

OFFICE NOTES

Mr Derr left last Wednesday for a trip of several weeks' duration throughout the South, in connection with general grain work.

Mr. Potter expects to leave on the 7th instant for Minnesota where he will remain for some weeks conducting investigations with cereal diseases

Miss M J. Schwab has been appointed to the position of clerk in this Office, being transferred from the Office of Foreign Seed and Plant Introduction

GENERAL NOTES

Mr. L. C. Burnett, in charge of the cooperative oat work at the Iowa Experiment Station, has written Bulletin No. 128 of that Station, entitled "Some Data for Oat Growers", which has just been issued.

STATION NOTES

TEXAS:

Amarillo Experiment Farm. Mr. John F. Ross reported on March 15 that the ground was frozen too hard to make much progress with spring plowing. He expected to get the seeding done by the end of the month. Mr. Cory reported rain and hail amounting to .70 inch April 1. Mr. Rothgeb leaves Washington, D. C., on April 7 for Hays, Kans., to consult with Mr. Kiene about grain-sorghum work, and will proceed from there to Amarillo.

Beaumont Rice Experiment Farm. The weather is too wet to date to permit planting of rice.

Dalhart Experiment Farm Mr. Rothgeb will have supervision of the cooperative work of this Office at Dalhart.

CALIFORNIA:

Chico Grain Work Mr. H. F. Blanchard has resigned from the Department to accept the position of manager of a very large farm at Bothell, Wash., near Seattle, his resignation

taking effect the end of March. Mr. E. L. Adams has accepted a transfer to take charge of the grain work in California, expecting to leave for Chico as soon as the seeding at the Judith Basin Farm is completed. Appointment has not yet been made to fill the position at Moccasin to be vacated by Mr. Adams.

LOUISIANA:

Crowley Rice Experiment Farm. Continued rains prevent planting of rice

KANSAS:

Hays Branch Experiment Station. Mr. A. F. Kiene, Jr., has been appointed to take charge of the cooperative grain work at Hays. He was unable to reach that point, however, until March 16, train service being interrupted by drifted snow. Snow remained on the ground at Hays until March 30 Oat planting began April 2. Apparently all winter barley, oats, spelt and emmer were winterkilled; also all fall-planted spring wheats.

Manhattan. Dr. N. E. Stevens was appointed some time since as Collaborator in connection with cereal disease investigations at the Kansas Experiment Station.

COLORADO:

Akron Experiment Farm. Mr. McKee reports unusually cold weather for March, it being warmer on the 28th. The snow is melting quite rapidly. It will be some time, however, before field work can be done. All grains survived the winter except winter oats and some winter barley.

SOUTH DAKOTA:

Bellefourche Experiment Farm. Mr. Salmon reports cold and stormy weather up to April 1. No field work has been done.

Highmore Experiment Station. Mr. J. D. Morrison has been appointed to take direct charge of the gain work at Highmore, beginning March 16. Preparations for spring seeding are in full progress. Mr. Champlin reports abundance of moisture in soil and subsoil. Winter wheat and rye appear to have survived at Highmore.

NORTH DAKOTA:

Dickinson Experiment Substation. Mr. J. A. Clark reports two feet of snow and temperature about zero, March 18.

Williston Experiment Farm. Mr. Babcock reports on March 29 that there was considerable ice and snow, with normal spring Nursery rows appear to have come through the winter in good condition, but it is too early to know about the other grains.

MONTANA:

Judith Basin Experiment Farm. Mr. Adams reports stormy weather March 26. Winter wheat suffered but it is not yet known to what extent. The area seed to winter wheat in the Judith Basin is only about two-thirds that seeded last year, consequently there will be larger acreage of spring wheat sown. Many inquiries are received from farmers regarding flax growing. They also show much interest in the growing of barley on the dry lands.

IDAHO:

Aberdeen Experiment Farm. Mr. Aicher reported late in March that it was still snowing and the spring was backward. The new buildings on the farm are now completed. They include house, barn and seedhouse. The house has pneumatic water system which is extended to the horse barn and other outbuildings. Photographs sent in show the buildings to be very attractive in appearance. Both dry farming and irrigation will be practiced at this station.

UTAH:

Nephi Substation. Mr. Cardon reports 6 inches of snow on March 31. Not likely to be able to begin seeding soon.

OREGON:

Burns Experiment Farm. Mr. L. R. Breithaupt has been given charge of the cooperative grain work at Burns, under appointment from this Office. The buildings at Burns are nearly completed, being somewhat similar to those at Moro. Fencing is soon to be done.

Eastern Oregon Dry-Farming Substation (Moro). Mr. Stephens reports the winter has been favorable and winter grain plats in general looking fine. Winter emmer and most of the winter oats in good condition. In letter dated April 1 he states that the weather is very favorable and spring seeding is being rushed.

RECEIVED
MAR 3 - 1913

NEWSLETTER

OF THE

OFFICE OF GRAIN INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S DEPARTMENT OF AGRICULTURE

1912

Volume IV

1912.

April 20, 1912.

OFFICE NOTES

Mr. Chambliss left Washington for a Western trip April 18. He will visit San Francisco and points in the Sacramento and San Joaquin Valleys, California; also points in Texas, Louisiana, and Arkansas. He expects to be away about a month.

Mr. Harlan will leave for St. Paul, Minn., about April 22. When his spring planting of barley varieties at that place is completed, he plans to go to Chico, Cal., for the purpose of harvesting the barley plats at the Plant Introduction Garden. He will visit state experiment stations and experiment farms in Iowa, Kansas, Texas, Arizona, Nevada, Utah, Colorado, and Nebraska, returning to St. Paul.

Mr. Derr's trip through the South is proving both pleasant and satisfactory. He reports the meeting of the Southern Commercial Congress at Nashville to have been an interesting one, and also states that arrangements have been made with farmers for cooperative work.

Mr. Potter writes enthusiastically regarding his work in Minnesota, and indications are that he is kept very busy.

Appointment of Mr. C. W. Warburton, Agronomist in Oat Investigations, has been received the appointment to begin June 1.

Mr. T. R. Stanton has been appointed Scientific Assistant in Agronomy, instead of Agent, his former title.

STATION NOTES

LOUISIANA:

Crowley Rice Station. Continued rains are reported, there being two inches of precipitation Tuesday, April 16.

KANSAS:

Mr. Rothgeb left Hays for Amarillo on the 14th.

COLORADO:

Akron. Mr. McKee reports most of the winter grains alive and winter rye in exceptionally good condition. The weather in the early part of April was almost like midsummer; spring work was commencing as the snow rapidly melted. Snow fell on the night of the 12th, however, followed by wind averaging 34 miles for eleven hours.

SOUTH DAKOTA:

Highmore. Mr. Champlin reports the conditions at Highmore this season the most favorable he has ever seen.

Seed for trifocal experiments with wheat, oats, barley, and flax has been received. This season's grain cultivation experiments have been started, including rate and depth of seeding; also comparison of barley treated by the specific gravity method, and not treated, both two-row and six-row barley being used.

Mr. Champlin writes on the 15th that all seeding of field plats of oats was completed; nursery seeding and seeding of field plats of wheat was delayed by rain which began on the 12th. The rain has been general and will do considerable good, the total precipitation at Highmore being about 1.5 inches.

MONTANA:

The principal seeding of grains at the Judith Basin Station is expected to be completed about April 22. Mr. Adams will probably leave for California about May 1.

OREGON:

Eastern Oregon Dry-Farming Station (Moro). Mr. Stephens reports that a plat of three acres of tillage planted to Turkey wheat has been reseeded this spring on account of weeds. All field winter wheat has to be resown to spring wheat. Treating seed with formalin, one pound to 30 gallons of water, has resulted in about half a dozen plants to every square rod. The problem of controlling volunteer grains at this station is a difficult one.

Weather is favorable. Most of the winter wheat in the vivinity is in excellent condition. The winter grains at the station are making good growth, with the exception of oats, most of which has been killed.

Seed has been planted as follows:

Rate- and date-of-planting tests ...	7	tenth-acre plats
Variety test of field peas	24	" " "
Peas on rotation plats	31	" " "
Spring barley	38	" " "
Oats	13	" " "
Rye	2	" " "
Emmer	1	" " "
Tillage experiments	70	" " "
Field peas for field test	6	acres
Spring wheat for pasture ,,.....	10	"

MAR 3-

NEWSLETTER

OF THE

OFFICE OF GRAIN INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S DEPARTMENT OF AGRICULTURE

MAY 4 1912

MAY 4 1912

Volume IV

1912.

May 4, 1913.

OFFICE NOTES

Mr. Derr returned to Washington on April 27 after an absence of three and one-half weeks. He reports a profitable trip, but found it necessary to omit visiting points in Louisiana and Mississippi as the continued rains throughout that section made it impracticable for him to do work in those states on this trip.

Mr. Farrell has been transferred from this office to the Office of Western Agricultural Extension, to take effect June 1.

Miss Blanche L. Chadwell has been appointed clerk, stenographer, and typewriter in this Office, her appointment taking effect May 1.

STATION NOTES

TEXAS:

Amarillo Experiment Station. Mr. Rothgeb reports that he expects to finish thrashing grain-sorghum head selections about May 1.

There were a few light showers during the week ending April 27.

LOUISIANA:

Crowley Rice Experiment Station Mr Jenkins reported the land saturated with water and did not expect it would be in condition for planting before the last days of April.

KANSAS:

Hays Branch Experiment Station. Mr. Kiene reported frosts for two nights, April 17 and 18, the effect of which was noticeable on the wheats and barleys. There was very welcome precipitation on April 27 and 28, amounting to 1.34 inches. Wheat plats and one plat of rye had begun to show the effects of drought.

All winter grains are planted and the spring variety seeding is almost completed.

Oats and barley not in the best condition, probably owing to cold and dry conditions of ground near the surface

Early planting of grain-sorghums expected to be completed before May 10.

COLORADO:

Akron Experiment Station. Mr McKee reports that winter emmer winterkilled more than was at first thought. Barley and oat variety tests were planted and nursery work well started by April 16. Weather cool and spring growth correspondingly slow. Winter nursery beginning to show signs of life.

Snow on April 18 followed by rain which left the ground too wet to be worked. Hail and rain on the 20th. No damage was done by the hail as the crops were not high enough to be injured.

April 24. Nursery work progressing nicely. No grain has as yet come up, the ground being too cold to permit seed germination.

April 27. Weather exceedingly windy. Planting of row tests and spring grains progressing satisfactorily.

SOUTH DAKOTA:

Bellefourche Experiment Station. Rainfall of over 3 inches reported on the 13th inst. Weather still remains rather cool. All grains seeded except nursery plantings.

Highmore. Mr. Champlin reports that all but a few scattering plants on the wheat plats have winterkilled, with the exception of one tenth-acre plat of Kharkov, No. 1442, about 20 per cent. of which is still alive. This is a strain of Kharkov descended from Mr. Shelley's selection No. 18 made at Akron, Colo., in 1909.

NORTH DAKOTA:

Dickinson Experiment Substation. Mr. Clark reports wheat winterkilled badly on fallowed land; one plat of Turkey wheat stood the winter very well. Where wheat was planted between corn rows and the corn left standing there is apparently no winterkilling. Winter emmer entirely winterkilled.

Williston Experiment Station. Mr. Babcock reports the weather below freezing until April 16, also wet. No seeding yet at station or in surrounding territory. Unless there is further rain seeding will be under way by April 25. Not yet possible to estimate the percentage of survival of winter wheat.

MONTANA:

Judith Basin Experiment Farm. On April 25 Mr. Adams reports rainy weather delaying field operations. Rain amounting to 0.62 inch fell which was unwelcome as moisture was not needed Nursery and practically all variety tests seeded.

IDAHO:

Aberdeen Experiment Farm. April 22 Mr. Aicher reported snow a few days before, but expected to begin planting in a few days.

OREGON:

Eastern Oregon Dry-Farming Substation, (Moro) Mr. Stephens gives the following report for week ending April 23:

Weather Conditions. Wind: Total number of miles 1,882, the greatest number for any one day being 431 miles on the 18th. Temperature: Maximum for the week 61 degrees, three days having maximum of 48, 48, and 54 degrees; minimum for the week, 29 degrees.

Grains have made very little growth on account of the cold weather. The wire worms, too, have been working and may do considerable damage. The injury at present is most apparent on the spring wheats and barleys.

During the week 50 acres of summer fallow were double disked and harrowed, and nursery planted as follows:

16	1/80-acre plats of selections of wheat.	Series	"C"	1911
40	8-rod rows of wheat.	"	"	1912
14	" " " oats.	"	"	1912
10	" " " barley.	"	"	1912
66	15-link rows- wheat.	"	"A"	1912

During the coming week efforts will be made toward getting late spring seeding of grain completed and other experiments under way.

MAR 2 - 1913

NEWSLETTER

OF THE

OFFICE OF GRAIN INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S DEPARTMENT OF AGRICULTURE

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May 13, 1912.

OFFICE NOTES

Mr. Carleton has asked for a furlough from June 15, 1912, to June 30, 1913, in order to accept the position of general manager for the Pennsylvania Chestnut Blight Commission. His headquarters will be in Philadelphia, where he will direct and supervise the entire work.

His taking charge of this work was unpremeditated and his proposed absence comes as a shock to the office. The work in the office and at the stations will be continued without change. Mr. Ball is Acting Cerealist in Charge.

Mr. Carleton left Washington May 16 for a field trip. He expects to visit State College, Pa.; St. Louis, Mo.; Manhattan, and Hays, Kans.; Amarillo, and Dalhart, Texas; Oklahoma City, Okla.; and possibly other points. He will probably be away about three weeks.

Mr. Johnson left on May 16 for Manhattan, Kans., where he expects to remain until the evening of the 20, proceeding thence to Amarillo, Texas, leaving Amarillo about the 28th for points in New Mexico, Arizona, California, Nevada, Utah, Colorado, and Minnesota. He will remain in Minnesota until the end of this fiscal year.

Mr. Ball will leave about the 22nd on a flying trip to the experiment farms at Amarillo and Hays; also visiting the State Experiment Stations at Manhattan and Ames.

Mr. Harlan expected to be in Manhattan on the 15, going from thence to points in California, and reaching the Plant Introduction Garden at Chico about May 25.

STATION NOTES

LOUISIANA:

Crowley Rice Experiment Station. Mr. Jenkins reports good weather for the week ending May 4; soil drying out very fast and work progressing rapidly.

TEXAS:

Amarillo Cereal Field Station. May 6. Mr Ross reports warm weather, high winds, and drying of surface soil. Corn planted on spring plowing April 27 had not come up. Another planting was made May 6. Sod breaking had to be discontinued until there was further rain. May 13. About 1/2 inch of rainfall reported. Cool and windy. Crops looking fine. First planting of corn is up. First-date planting of sorghums completed May 11.

Nearly 150 fruit trees and 300 forest trees have been planted at the station this spring, the fruit trees in cooperation with the Office of Field Investigations in Pomology.

Beaumont Rice Experiment Station. May 4. Mr. Johnston reports heavy rains and states that the season is backward.

KANSAS:

Hays Branch Experiment Station: Mr. Kiene reported precipitation amounting to 1.74 inches on May 8 and 9. This will prevent field work for a few days as the ground is thoroughly soaked and weather cloudy with little wind. Spring grains are doing well. Winter grains beginning to joint. Wheat is particularly fine. Alfalfa coming up well.

COLORADO:

Akron Experiment Station. Mr. McKee reports May 6: Windy weather, the wind averaging 17.7 miles an hour for 24 hours. Even with 1.32 inches rainfall there was considerable dust in the air at times. Nursery and row planting of small grains finished. Spring wheat coming up with excellent stand. Winter wheat plats looking fine. Tennessee Winter barley used in uniform experiments entirely winterkilled; also Boswell Winter oat. The plats have been re-seeded to Galgalos wheat, No.2398, the best-yielding spring wheat at this station for the past two years. A tenth--acre plat of Buffum's Improved winter emmer was seeded last fall only a few plants of which survived the winter.

SOUTH DAKOTA:

Bellefourche Experiment Station (Newell). May 7. Mr. Salmon reports a rain amounting to 1.1 inches with practically no runoff, almost all entering the ground even on sod land. Nearly all the spring grains are up. Prospects excellent.

NORTH DAKOTA:

Williston Experiment Substation. Mr. Babcock reports 2.13 inches precipitation for the month of April, and 1.91 inches from May 1 to 11. Conditions very favorable and grains coming up nicely. Germination excellent. Seeding completed with the exception of flax and proso

MONTANA:

Judith Basin Experiment Station (Moccasin). May 6 Telegraphic communication with Moccasin, Mont., was interrupted for two days on account of snow storm.

Mr. Adams left for Chico on May 7. Mr. Noble C. Donaldson has received appointment to take charge of the work at this station, expecting to report May 16.

The earliest seeding of spring grains in the nursery is coming up. Ground is in excellent tilth and seeding has been done under the most favorable conditions. Only a small portion of the winter wheat at the station winterkilled. Improved Winter wheat No.17, from Mr. B. C. Buffum, Worland, Wyoming, practically all winterkilled, while his Improved Winter emmer came through with a survival of approximately 35 per cent. This is the first time winter emmer at this station has survived the winter. Other winter emmer, together with winter oats and barley, all winterkilled. An unusually large acreage of spring cereals is being seeded in this section, particularly flax.

UTAH:

Nephi Experiment Station. May 12 Mr. Carden reports that the weather is growing warmer and the cereals are beginning to make good growth. Large crops, however, can hardly be expected owing to exceedingly unfavorable conditions earlier in the season. All planting has been done and the season's work is in good shape.

CALIFORNIA:

The location for a new cereal field station has been selected near Biggs, to be conducted in cooperation with the Sacramento Valley Grain Association. Memorandum of Understanding covering the cooperative work is now being signed. Mr. E. L. Adams will be in charge of this station.

OREGON:

Eastern Oregon Dry-Farming Substation (Moro). For the week ending May 6 Mr. Stephens reports:

The velocity of the wind is increasing as the season advances, the total wind movement for the week ending April 28 having been 1290 miles, and for the week ending May 5, 2087 miles. On May 3, 3 and 4 the wind movement was 393, 447, and 327 miles respectively.

Maximum temperature for the week was below 60 degrees; minimum, 31 degrees April 29.

Total precipitation for two weeks was .53 inch distributed over seven days, the largest amount for any one day being .13 inch April 30.

The continued cold weather and wire worms are doing considerable injury to spring grains. So far winter grains are apparently all right. Undoubtedly winter grains will be much more successful this season than spring varieties, though usually the reverse is true.

Nursery seeding is completed; three acres of oats planted, including a rate-of-seeding test and increase plats of Swedish Select, Kherson, and Sixty Day varieties. The late seeding of wheat (including different rates) is completed. Spring oats are doing well. One plat, a selection of Mr. Shelley's from Akron (6P4) Sixty Day, is noticeably ahead of all others. From its height one would think it had been seeded two weeks earlier than the other varieties, instead of at the same time.

MAR 2 1913

NEWSLETTER

OF THE

OFFICE OF GRAIN INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S DEPARTMENT OF AGRICULTURE

JUN 1 1912

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June 1, 1912.

OFFICE NOTES

Mr. Ball left for a trip to Texas and Kansas on May 22; arrived at Amarillo on the 25th, and was at Wichita, Kans., on the 28th.

Mr. Chambliss returned from his trip through the West and South on May 24.

Mr. Carleton was at Amarillo on May 27 en route to Oklahoma. He expects to be in Washington on June 4, going to Philadelphia about the 6th.

Mr. Johnson was in Amarillo on May 25.

Mr. Potter expected to remain in St. Paul until about June 1, time for hybridizing grains at Manhattan, when he will proceed to that place, remain about a week and return to St. Paul.

There have recently been prepared and added to the office files three reports which will be of interest and value to the field men during the winter months.

The first is a set of brief summaries of the results obtained in 200 grain-cultivation experiments conducted by this office from 1900 to 1911, inclusive.

The second is a set of similar summaries of 190 grain-cultivation experiments reported by 25 state experiment stations. The experiments include tests in practically all operations in the culture of wheat from arrangements of the cropping system to harvesting and storing. The two sets of summaries are so indexed as to facilitate reference to the original reports or bulletins.

The third report summarizes the yields obtained in 9 of the tri-local experiments from their beginning to 1911.

FIELD NOTES

LOUISIANA:

Crowley Rice Experiment Station. Mr. Chambliss reports the general rice conditions in Louisiana as follows: The overflow caused by break in the Mississippi River levees has injured the rice crop to the ex tent of at least $50,000, probably more.

Continued rains in the winter and an extremely wet spring have delayed planting. All kinds of methods are being resorted to in putting in the commercial crop, which will result in an exceedingly weedy crop, with of course, correspondingly low yields.

TEXAS:

Amarillo Cereal Experiment Station. Mr. Cory reports that work has been done with carbon disulphide to eradicate the large red ant, and results have been very satisfactory.

Precipitation for the ten days ending May 25 amounted to 0.36 inch.

The grains are in good condition as there is sufficient moisture to favor growth. Winter rye is in full head; other grains are beginning to head--the oats and wheat rather close to the ground.

On May 25 Mr. Rothgeb reported almost all grain-sorghum varieties planted.

Beaumont Rice Experiment Station. The principal work at Beaumont will be in the nursery as it is too late to put in cultivation, irrigation, and rotation experiments. As late as May 21 no land had been plowed on the farm.

Work on the new laboratory will begin within thirty days. The amount needed for this was secured through popular subscription.

KANSAS:

Hays Branch Experiment Station. Mr. Kiene reports temperature as low as 33 degrees the middle of May. Early plantings completed by the 15th. Ground too wet for best work.

COLORADO:

Akron Experiment Station. Mr. McKee reports spring grains making good growth and winter wheat looking exceptionally well. Corn has been planted on the rotations. Dwarf milo and White kafir were planted by the 17th.

Maximum temperature for two weeks ending May 27 was 85 degrees on the 27; minimum 32 degrees on the 14. Total precipitation for the period was 0.63 inch, the largest amount for one day being 0.55 inch on May 14. There is considerable wind and the ground is drying rapidly.

SOUTH DAKOTA:

Highmore Experiment Station. On May 20 Mr. Champlin reported that all grain plats are very promising. Corn planted the previous week and sorghums to be put in the week following.

NORTH DAKOTA:

Williston Experiment Substation. Mr. Babcock reports seeding completed about May 20. While everything has germinated nicely growth is slow owing to the cool weather. He reports warmer weather, however, on the 25. The stand of all spring crops is probably the best that has been known in that locality for five years.

All winter grains that were seeded on bare summer fallow totally winterkilled; one plat of G. I. No. 1543 seeded in standing corn came through with a survival of 90 per cent and is now about 6 inches high. Only 6 rows of the winter nursery survived, with an average stand of from 5 to 20 per cent.

Precipitation between May 15 and 25 amounted to 0.83 inch, total from May 1 to 25, 2.78 inches. Temperature for same period, maximum 85 degrees; minimum, 31 degrees.

IDAHO:

Aberdeen Experiment Station. Mr. Aicher reports in in letter dated May 16 that frost nipped all the grains that were up,but not seriously.

CALIFORNIA:

Chico. Mr. Adams reported May 19. Grains at the Plant Introduction Garden looking well, particularly winter wheat and some of the barley. Harvest will begin in two to three weeks.

Weather unusually warm, maximum temperature 96 degrees. There are still occasional rains in the Sacramento Valley, which is unusual so late in the season.

OREGON:

Eastern Oregon Dry-Farming Station (Moro). On May 21 Mr. Stephens reported precipitation amounting to 0.50 inch in soaking showers. Without further rain, if other conditions are favorable, a good crop of winter wheat is assured. Some of the winter wheats, where the stands were thick, were beginning to show need of moisture. Several plats of barley are heading.

On May 23 Mr. Stephens expected to attend the State Threshers' Association at Condon, Oregon, and give a talk on the Moro work. The State Experiment Station officials and people of Moro are agitating the question of having an excursion to the farm about June 15. A "Picnic Day", therefore, will probably be arranged at that time.

MAR 7 1913

NEWSLETTER

OF THE

OFFICE OF GRAIN INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S DEPARTMENT OF AGRICULTURE

June 15, 1912

Volume IV

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June 15, 1912.

OFFICE NOTES

Mr. Carleton made a short visit to the office June 14.

Mr. Ball returned to Washington on the morning of the 7th.

The entire office force was glad to welcome Mr. Warburton back on June 1. Mrs. Warburton will not return to Washington for some weeks.

Mr. Harlan and Mr. Johnson are both in California expecting to return to St. Paul about the end of the month. Mr. Johnson plans to visit the stations at Nephi and Akron on his return trip.

FIELD NOTES

TEXAS:

Amarillo Cereal Experiment Station It was reported in the early part of June that the small grains were beginning to suffer from the dry windy weather. As this is their heading period yields may be somewhat decreased. Winter grains are nearly all in full head; also Burt oats. Grain-sorghum varieties mostly up with good stand.

Precipitation amounting to 0.17 on the 9th.

KANSAS:

Hays Branch Experiment Station. Weather continues dry and high winds have made considerable impression on the wheats. Spring-grain plats in good condition; Burt oats beginning to head with rather short straw; planting of grain-sorghums, kafirs and milos completed the last week in May.

COLORADO:

Akron Experiment Station. In letter received June 7 Mr. McKee reports that the weather has been dry with, however, 1.14 inches precipitation for the two weeks ending June 3. Maximum temperature for the same period 92 degrees; minimum, 35 degrees. The rain was especially welcome as the grain showed the need of it - particularly winter wheat. Grain-sorghum varieties planted; spring grains making good growth but have been hindered somewhat by the dry weather.

During the week ending June 10 precipitation amounted to 0.11 inch; maximum temperature 80 degrees, minimum, 45 degrees.

Winter barley and rye have headed A wide difference is noticed in the vogor of the pure strains of emmer and barley which came from Highmore as compared with the common varieties grown here Emmer, G. I. No. 1524, from Highmore is much more vigorous and uniform in growth than the other, and the same can be said of the Highmore barley, G. I. No. 531.

Mr. Pfender, of the Scottsbluff station, and Prof E. C. Chilcott visited the station on the 9.

NORTH DAKOTA:

Dickinson Experiment Substation. Mr. Clark reports that all spring planting was completed June 1, germination being good but the stand not so thick as last year, owing to lower rate of seeding Wheat is stooling exceedingly well, durum wheats making a much ranker growth than the common, averaging 10 inches in height for those planted April 6. Winter wheat but little farther advanced than spring wheat.

A plat of Turkey wheat planted in corn stubble with corn left standing was accidentally disked early in the spring. The grain was apparently nearly all cultivated out but made surprising recovery and now has stand of about 75 per cent.

Some crosses of Turkey (185 in number) were given a light covering of straw last fall. These came through the winter in good shape.

Winter rye headed the first of June? The stand is heavy and will average over three feet in height This is a promising crop for western North Dakota

Precipitation for May was 4.12 inches, normal being 2.51 inches.

Maximum temperature for May was 82 degrees; minimum, 32 degrees. No temperature below freezing since April 28.

Williston Experiment Substation Mr. Babcock reports for the week ending June 1 that seeding is practically completed in that vicinity, considerable flax having been sown.

Maximum temperature for the week 80 degrees; minimum, 45 degrees.

Total precipitation for the month of May 4.19 inches, amounting to 3.83 inches above normal for the months of April and May.

Precipitation for May amounted to 1 inch, the maximum for one day being .38 on the 21. Season cold and backward and growth of grains consequently slow.

IDAHO:

Aberdeen Experiment Station. Mr. Aicher reports that compacting soil before seeding clover is giving much better results than when seeded without compacting, although the season has been favorable for seed sown on loose soil. Seed broadcasted is considerably behind that drilled. Deeper-seeded plats while slower in coming up are doing nicely with better stand than shallow seeding.

OREGON:

Eastern Oregon Dry-Farming Station (Moro). Mr. Stephens reports for the last two weeks in May maximum temperature of 86 degrees; minimum 37 degrees.

Precipitation amounted to 1.04 inches .47 of which came on the 19 in a good shower which has done much good as the rains were not followed by high winds. During this period there has been less wind than usual, the highest being 290 miles on the 20, and the lowest 63 miles on the 24.

The prospect is that there will be good wheat crops in the vicinity of Moro, yields being estimated at from 30 to 40 bushels per acre. The yields for the past few years have not averaged more than 10 bushels per acre in this vicinity.

Grains on the station looking fine. Corn and most of the grain-sorghums are up. Alfalfa, a very difficult crop to establish in this section, is doing well.

Some of the winter barleys in full head and a few of the winter wheats are beginning to head. "Arlington Awnless" of which we have a few rows, is headed and is all true to type. It was seeded nearly a month later than the other barley varieties but will be among the first to ripen.

Boswell winter oat, G. I. No. 480, is looking fine. Cliff and Bulberson have a very poor stand in comparison, but the plants that survived are considerably earlier than the Boswell. Both Cliff and Culberson are beginning to head.

Much interest was shown in the convention of the State Threshers' Association recently held at Condon, Oregon.

CALIFORNIA:

Mr. Adams reports for June 4 maximum temperature for the season, 111 degrees.

The hot weather caused the grains to ripen very rapidly, which to a certain extent injured the quality. Mr. Harlan has been of much assistance in harvesting the grains which all ripened at once.

The rice plantings in California are in splendid condition and prospects for large crop are good.

In the June issue of the Sacramento Valley Monthly is a two-page article, with good illustrations, giving an account of the work at the Plant Introduction Garden at Chico including brief mention of the cereal investigations.

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Owing to a decision made early in the spring by a committee appointed for the purpose of investigating, among other things, the exact legal status of purchasing supplies for government use, it is very difficult now to obtain even the most necessary articles in common use unless they are under contract. An effort is being made to have the 1913 General Schedule cover everything which will be needed, but this will take some time and we can hardly hope that even then the inconvenience will be entirely overcome.

Owing to rigid scrutiny of all official matters, the greatest care should be taken by field and travelling employees of this Office, to insure that all travel or work conducted at experiment farms, all purchases, shipments of freight, express matter, in short, all financial transactions of any kind comply with the letter of the Fiscal Regulations and with the instructions given in Letters of Instruction, Bills of Lading and other official documents, as well as in correspondence from the Office. This will avoid delay, legal complications, and pecuniary loss by individuals. An employee not provided with a copy of the Fiscal Regulations should apply to the Office for same.

An inventory of the Government property charged to this Office at each field station will be sent before June 30 to the assistant in charge of the station. Great care should be taken in checking promptly the articles now in stock and reporting the disposition made of any charged which are not now in stock.

This is not an office, but a departmental matter and the office is held strictly accountable for every item on the inventory.

NEWSLETTER

OF THE

OFFICE OF GRAIN INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S DEPARTMENT OF AGRICULTURE

JUN 28 1912

Volume IV

1912.

June 28, 1912.

OFFICE NOTES

Mr. Ball left Washington on the 17th for a trip of about twelve days in the West. The principal object of the trip was to consult the Wyoming State Experiment Station officials regarding establishing a cooperative cereal experiment station in Wyoming and to select, if possible, a suitable site. He also visited the Nephi and Akron stations.

STATION NOTES

TEXAS:

Amarillo Cereal Field Station. Rain amounting to 1.67 inches is reported June 13, with no evidence of run-off. The winter wheats had been damaged somewhat by drought but may now fill in fairly good condition. Spring wheats are looking fine; also oats, though the straw of the latter is rather short.

Less smut than usual is reported.

Dalhart. Mr. Rothgeb reports that a hail storm damaged the small grains to a considerable extent, it being necessary to replant the sorghum plats. There was more injury to the oats and barley than to wheats.

KANSAS:

Hays Branch Experiment Station. Precipitation amounting to 1.19 inches since last report. Stand of grain-sorghums not so good as when they first came up. Some of the kafirs may have to be replanted.

Weather cold for the season.

COLORADO:

Akron Experiment Farm. Between June 11 and 17 rainfall amounted to 3.78 inches. The precipitation between June 18 and 24 was only 0.06 inches. Maximum temperature for week ending June 17, 84 degrees; minimum, 44 degrees. Maximum temperature for week ending June 24, 80 degrees; minimum, 37 degrees.

The growing weather during the week ending June 24 was very good as there was but little wind and plenty of moisture from the rains of the week before. The winter wheats headed out completely during the past week. The

straw will be somewhat short in places due to spots in the soil. Oat and barley varieties are heading out well. Spring grains all looking fine. Crops generally in good condition throughout the locality.

Mr. Johnson and Mr. Harlan visited the station on the 22nd.

NORTH DAKOTA:

Dickinson Experiment Substation. Mr. Clark reports that there were only two clear days the first half of June. All grains making rapid growth. Winter and early-sown spring wheat beginning to shoot. Turkey wheat crosses beginning to head. Winter rye over five feet high and in bloom.

June 24. Maximum temperature for the past two weeks 90 degrees; minimum, 30. Precipitation 2.01 inches.

On June 21 Mr. Clark went on Special Farming train to Belfield and Beach, talking on cereals, soil moisture and crop rotation.

General conditions in vicinity visited: Continued wet weather has made plowing with steam and gasolene power practically impossible, causing a great reduction in area seeded in that section.

Lack of feed for stock compelled many farmers to drill their grains directly into last year's stubble. Many, however, disked their land before drilling in their seed.

Williston Experiment Substation. Mr. Babcock reports for two weeks ending June 22, maximum temperature 90 degrees with hot winds; minimum 31.5.

Winter rye headed; spring rye and winter wheat heading; also Gatami barley, C. I. No. 575.

Five early wheats, C. I. Nos. 2399, 2402, 2404, 2911 and 2198, which have shown resistance to drought for two years are now beginning to head.

SOUTH DAKOTA:

Bellefourche Experiment Station (Newell). On June 22 Mr. Salmon reports dry weather which, if continued, will result seriously to the grain crops, as there is no soil moisture to draw upon owing to the severe drought

of last year. It is doubtful if some of the plats will recover sufficiently to make a good crop should rain be received at once. Some of the plats, however, are as yet little damaged.

MONTANA:

Judith Basin Substation (Moccasin) Mr. Donaldson reports all grains making splendid growth.

Maximum temperature 90 degrees, June 23. Ground well supplied with moisture from rains received the latter part of May so that grains have not shown any ill effects of dry weather as yet, but another week of drought will mean an almost total failure for the spring crops in the Judith Basin and will greatly reduce the yield of winter wheat.

A disease said to be flax canker is attacking flax, especially the early sowing, and is also beginning to affect some of the variety plats.

UTAH:

Nephi Experiment Station. Mr. Cardon reports exceedingly dry weather. Grain crops will ripen about July 15, this season, being nearly three weeks later than last.

NEWSLETTER

OF THE

OFFICE OF GRAIN INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S DEPARTMENT OF AGRICULTURE

JUL 13 1912

Volume IV

1912.

July 13, 1913.

IMPORTANT

The appropriation bill has not been passed. Expenses must be kept down during July because the amount available under the "Continuing Resolution" is much less than we ordinarily expend during this month.

On receipt of this Newsletter, please report promptly the total expenses incurred since July 1, and itemized statement of proposed expenses from then to July 31. This information will permit funds to be shifted where most needed, in case the appropriation bill does not pass before the end of July.

Note carefully General Order No. 155 recently mailed you. No attendance at meetings or conventions of any kind is permitted except at personal expense of party attending. Authorizations to attend and to take leave for that purpose, must still be obtained, leave so taken being either with or without pay as the Secretary may direct.

Within a few days a circular calling special attention to certain paragraphs in the fiscal regulations will be mailed you, the neglect of which has caused trouble--occasionally serious.

OFFICE NOTES

Mr. Chambliss left on July 6 for Beaumont, Texas, and a trip throughout the rice belts of Texas, Louisiana and Arkansas.

Mr. Warburton also left on the 6th for Ames, Iowa, where he will remain until the end of the month.

Mr. Ball expects to leave within a few days for Cornell University, and from there will proceed westward, as fast as possible, to the following places: Lansing, Mich.; Chicago, Ill.; Madison, Wis.; St. Paul, Minn.; Brookings, Highmore and Newell, S. Dak.; Williston, Dickinson and Fargo, N. Dak.; Moccasin, Billings, and Bozeman, Mont.; Aberdeen, Moscow, and Gooding, Idaho; ~~and Bozeman, Mont.;~~ Logan, Utah; Moro, Burns, and Corvallis, Oregon; Pullman, Wash.; and Cheyenne, Wyo,, in order to see the grains on

the farms before harvest, as far as may be, and before thrashing where harvest has been completed.

Owing to financial conditions, it was not possible for Mr. Ball to start earlier.

Mr. Harlan, Mr. Johnson and Mr. Potter are, at present, all at St. Paul, Minn.

STATION NOTES

LOUISIANA:

Crowley Rice Experiment Station. General conditions favorable. Transplanted rices, as well as other rices, growing nicely.

Over one inch of rain June 30.

Ground plowed for other crops, lupins, cowpeas, soy beans, barley, rye and oats.

TEXAS:

Amarillo Cereal Field Station. Yields of winter wheats on fallow estimated at 15 bushels per acre. Thrashing commenced on Dry Land Agriculture plats July 6. Grain is good quality.

Winter emmer badly winterkilled. All row crops looking fine. A few good showers reported for week ending July 6.

COLORADO:

Akron Experiment Farm. Maximum temperature for two weeks ending July 8, 92 degrees on the 8th; minimum, 46 degrees on the 5th. Precipitation, 0.47 on the 1st. This rain was preceded by violent wind which did damage to grain plats and to buildings in the vicinity. The winter and spring wheat plats were not damaged at all, while the 5- and 6-peck seeding of oats showed the most damage. In spite of the conditions the grains are filling well, so far.

KANSAS:

Hays Branch Experiment Station. Light showers reported early in July. Owing to previous hot, dry weather the spring grain plats are ripening all at once. Burt oats nearly ready to cut. Winter grain plats harvested by the 6th, with fair yield. Early barleys have suffered most from the heat and drought, and late oats are in a little better condition than the earlier varieties.

SOUTH DAKOTA:

Bellefourche Experiment Station (Newell). Mr. Salmon reports that owing to the hot, dry weather harvest will be much earlier than normal, beginning not later than July 15.

Rain amounting to 1.78 inches, with practically no run-off, occurred the first week in July. This has been of much benefit to some of the later grains. The drought has affected part of the crops, however, to such an extent that they will not entirely recover. Early grains are ripening rapidly. Early oats and Gatami barley will be harvested shortly after the middle of July.

Highmore Experiment Station. Hot winds, continuing five days the latter part of June, did serious damage to the grain plats. Only the varieties that were beginning to joint at the time, as Kubanka wheat, are near failure. Sixty Day oats, Hannchen and Odessa barley, and Red Fife wheat (C. I. No. 3081), in field plats are best withstanding the present drought. Nursery is still in good condition.

A selection of kaoliang which was crossed with kafir-durra, No. 198-15-3, is the most vigorous of the sorghums.

NORTH DAKOTA:

Dickinson Experiment Substation. Rainfall on July 4, amounting to 1.24 inches (with, unfortunately, considerable run-off) followed nearly three weeks' dry weather.

Maximum temperature in June, 97 degrees, with average maximum 88.6 degrees.

Durum and Fife wheats headed; also Gatami and common barley, and Sixty Day, Perm and Kherson oats. Every proppect of a good crop in this locality. As many as 2500 crosses have been made with Turkey wheat.

Telegram from Mr. Clark states that the crop is practically all destroyed by hail on the afternoon of the 11th.

Williston Experiment Substation. Maximum temperature 99 degrees, June 30; minimum 53 degrees. Rainfall, 1.23 inches.

Conditions excellent for all crops. Heavy yields practically assured for this part of State.

Harvest expected to begin the last week in July.

NEWSLETTER

OF THE

OFFICE OF GRAIN INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S DEPARTMENT OF AGRICULTURE

JUL 27 1912

Volume IV

1912.

July 27, 1912.

No new developments as yet in the passage of the appropriation bill. It is still in conference.

OFFICE NOTES.

Mr. Ball expects to be at Brookings, S. Dak., on the 29th and will proceed from there westward.

Mr. Warburton is at the Cornell Experiment Station, Ithaca, N. Y. He expects to return to the office on the 29th.

FIELD NOTES

VIRGINIA:

Arlington Farm. Winter barley and oats have been harvested and thrashed. Winter wheats are now being threshed. Excellent yields are obtained. Several of the varieties have yielded thirty bushels, and indications are that the Purple Straw and several other varieties may yield as high as 40 bushels to the acre.

A number of varieties of barley and oats suffered severely from the extreme cold last winter. This is the first experience in the work of this office with severe winterkilling at Arlington Farm. A few of the varieties were almost entirely eliminated.

Arlington Awnless barley was for the first time sown in field plats and practically passed through the winter without injury. Mr. F. N. Meyer, Agricultural Explorer, Office of Foreign Seed and Plant Introduction, recently visited the Arlington Farm. He has lately returned from an extensive foreign trip and stated that in his travels he had come across nothing similar to the Arlington Awnless barley.

TEXAS:

Amarillo Cereal Field Station. July 20. Very hot, dry weather is reported. Corn and sorghums have suffered. Winter wheats are being thrashed. Yields vary from 11.86 to 17 bushels per acre. Spring wheats are being harvested.

COLORADO:

Akron Experiment Farm. Rainfall on the 17th amounted to .68 inch. Crop conditions excelle t.

SOUTH DAKOTA:

Bellefourche Experiment Station (Newell). Mr. Salmon calls attention to a peculiar condition in the spring wheats, especially the durums; the apparent failure of the heads to become pollinated or fertilized: "The only explanation I can give that seems to fit all cases is the possible effect of a period of hot weather during the latter part of June and first of July, when the wheats were beginning to head. The thermometer during this period, which continued from June 24 to July 1, registered from 95 degrees to 102 degrees. There were no hot winds so-called. Although the drought had begun to be severely felt I am satisfied that it had nothing to do with the condition mentioned as plats which had not shown the effects of drought, and edges of plats which had drawn water from the alleys were damaged as greatly as those which were badly damaged by the drought.

The condition is so general that it is likely to be one of the main factors in determining the yields in most, if not in all of our tests. For example, we have a time of seeding test with Kubanka durum wheat. Ordinarily early seeding here does the best. But this season the early sown plat (sown April 15) was damaged by drought much more than was the plat sown May 1, and it was confidently expected that with the recent rains the seeding of May 1 would produce the best. I find, however, that practically none of the heads of this plat contain grain although they are in the stage when the grains should be fully formed. On the other hand, the seeding of April 1 is scarcely damaged. Thus it seems that the early seeding may yet produce the highest yield although for a far different reason than usually obtains. Wide differences are also found between different varieties. As a general rule the durums are damaged the most, although there are plats of common wheat which appear to be damaged as greatly as any of the durums. Only one durum, an exceptionally early and usually a poor one, seems to have escaped entirely.

You will likely recall that in 1910 at this station and at many other stations in the Great Plains in 1910 and 1911, the durum wheats produced lower yields than the common wheats, and this is likely to occur again at this station this year. I mentioned this condition in my 1910 report as a possible cause of the low yields of the durums but do not recall that anything like it was observed at the other stations. Yet it may have been the dominant factor in determining the yields of the different varieties as the condition is not readily noticed unless one is looking for it.

"The appearance of the plants is entirely normal, except in some cases the heads have a chaffy appearance, and one would not realize that any damage was done unless a head was examined. There is another condition present here which I think should not be confounded with the non-fertilization of the flowers. This is the blighting of the heads or in some cases of the tips of the heads, in which case the head turns entirely white, or at least such part of it as is damaged. This condition seems to have been caused by drought and does not seem to have any relation to the hot period mentioned. I should mention that in this case the plant is dwarfed, although the stem and a part of the leaves remain green. In the former case the whole plant so far as can be seen, with the exception of containing no grain, is normal".

NORTH DAKOTA:

Dickinson Experiment Substation. The loss of crops by the hailstorm, reported in the last newsletter, was complete in the nursery, breeding, varietal, and increase plats.

Total precipitation for the first two weeks in July, 3.31 inches, compared with a normal of 2.05 inches.

Mr. Clark is making a tour of the country in the vicinity of Fargo and Dickinson for the purpose of obtaining cereal disease statistics.

Williston Experiment Substation: Precipitation for week ending July 20 amounted to 0.04 inch. Maximum temperature, 89.5 degrees; minimum, 37.5.

Conditions favorable for crops. Winter wheat nearly ripe and will be cut about July 29. Spring rye and barley, and also Sixty Day oats, will be ready for harvest the last week in July.

Crops at the station are somewhat in advance of those in the surrounding country, owing to earlier planting.

MONTANA:

Judith Basin Substation (Moccasin): Mr. Donaldson reports heavy rain and hail storm on the 11th (same time as the destructive storm at Dickinson, N. Dak.) Oats, barley and spring wheat, which were almost completely headed out, were totally destroyed. Flax was not so badly injured and should make a fair yield. The winter wheat crop will be reduced at least one half and will be of no comparative value. Winter wheat, including nursery, will be harvested in order to save as much of the seed as possible. Spring nursery work was almost entirely destroyed. At the time of the storm the crops were looking fine and making a splendid growth.

OREGON:

Eastern Oregon Dry-Farming Station (Moro). Winter grains harvested about July 20. Hot weather during the first week in June did considerable damage to some of the earlier varieties of winter grains. Sixty Day oats also suffered some. The beardless varieties of wheat and barley (particularly Virginia Hooded barley) were affected more than the others.

Harvesting in the vicinity of Moro commenced about July 15. Good yields are general, estimates on some farms being as high as 40 bushels per acre.

On "Farmers' Day" 300 farmers visited the station. Two very successful meetings were held, one in the afternoon and one in the evening.

MAR 2 - 1913

NEWSLETTER

OF THE

OFFICE OF GRAIN INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S DEPARTMENT OF AGRICULTURE

AUG 10 1912

Volume IV

1912.

IMPORTANT

Two recent decisions which are of special interest to men in the field:

EXPRESS: The use of Government bills of lading in the shipment of Government material by express has hitherto been permitted, but not desired. It is now required that wherever possible in the shipment of Government property bills of lading be used for express as well as freight. There is no change in the method of handling the triplicate bills of lading.

SUBVOUCHER ACCOUNTS: In cases where it is necessary for an employee to incur expenses for meals at one point for a number of consecutive days, the expense for such meals must be covered by subvoucher, or statement must accompany the account showing that each meal was paid for as taken.

OFFICE NOTES

Mr. Ball is still on his Western trip, expecting to be at Moro, Oregon, August 9 to 11.

Mr. Chambliss returned from his trip in the South on the 7th. He attended the meeting of the Southern Rice Growers' Association which was held at Beaumont, Texas, July 9 to 11, giving a talk on "Seed Rices" the afternoon of the 10th, and an illustrated talk on the rice work of the Department in the evening.

The meeting was well attended, over 400 rice farmers from Louisiana, Arkansas, and Texas, being present.

STATION NOTES

LOUISIANA:

Crowley Rice Experiment Station. A "Farmers' Field Day" will be observed at this station on August 20.

KANSAS:

Hays Branch Experiment Station. July 26. Mr. Kiene reports thrashing well under way. He expects to finish with winter wheat, oats, and barley by the 30th. It is estimated that winter wheat will average about 20 bushels per acre. Oat yields are light, and barley fair. Kafirs and sorghums are heading well.

It is exceedingly windy and dry.

COLORADO:

Akron Experiment Farm. July 29. Rainy weather has delayed the ripening of the spring wheats. Owing to the scarcity of help and the fact that all the other grains ripened at once, everyone has been kept unusually busy taking notes and harvesting.

Maximum temperature for the two weeks, 94 degrees on the 23d; minimum, 50 degrees on the 18th; precipitation, 2.86 inches, of which 1.50 inches occurred on the 25th.

Harvesting in the nursery was begun on the 19th. All small grain plats, both spring and winter varieties, promise to yield well.

Crops in the vicinity are looking fine and, as a result of the recent rains, the corn and grain- and forage-sorghums have excellent prospects.

August 6. A few plats of common spring wheat were harvested yesterday. All of the winter grains in plats are now harvested except Buffum's winter emmer, and winter durum (C.I.No.1586).

During the past week inclement weather interfered with harvesting operations, especially where the header was used.

Most of the winter wheat in the vicinity has been harvested and some farmers stated that they were going to cut their oats this week.

Thrashing at the station will probably begin by the 8th if the weather remains dry.

Corn and the sorghums are looking fine and promise a good crop.

NORTH DAKOTA:

Williston Experiment Substation. July 27. On the night of the 22d, 1.18 inches of rain fell in an hour or less, accompanied by a wind that laid nearly all the standing grain flat on the ground. Since that time most of the grain has come up again, and while it is not as pretty a stand as before, it will cut fairly well.

There is considerable rust on the wheats, mostly leaf but some stem, caused by the frequent rains and continued moist weather. If the moist weather continues much longer, it is feared that the stem rust may develop enough to damage the wheat.

The grains that have ripened at the station so far are: Winter wheat; Sixty Day oats; and most of the six-rowed barleys. In the nursery a few early spring wheats have been cut.

Temperature for the week: Maximum, 85 degrees; minimum, 52 degrees. Precipitation, 1.66 inches.

Our first "Farmers' Picnic" was held here today and was successful. Mr. Cole, of the Office of Dry Land Agriculture, was one of the speakers.

August 3. Harvesting is in full progress at the station. In the surrounding country the main harvesting will not be under way until next week.

MONTANA:

Judith Basin Substation (Moccasin). July 29. The spring grains that were destroyed by hail are being cut with a mower and taken off the plats; the flax has recovered to some extent and gives promise of making a fair crop.

Winter wheat is ripening very fast and harvesting will start within a few days. The work is being pushed in order to get the fall seeding finished as soon as possible.

The Fourth Annual Farmers' Picnic was held at this station on July 25. It is estimated that over 4,000 people were present.

IDAHO:

Aberdeen Experiment Station. July 31. Precipitation amounting to 1.2 inches, the heaviest rainfall ever recorded in that district. The grains which were not too far advanced will be benefited materially. The summer fallow was in excellent condition to receive and hold the moisture.

UTAH:

Nephi Experiment Station. The last report from this station states that the crops are looking fine and grains ripening well.

OREGON:

Eastern Oregon Dry-Farming Station (Moro). July 30. A slight shower delayed thrashing. The highest wheat yield so far has been only 15 bushels per acre, but only some of the poorest grain has been thrashed. Some of the wheat should yield more than 30 bushels per acre.

Maximum temperature for the week about 75 degrees, but for the week previous, 98 degrees.

The Agricultural Appropriation Bill passed the Senate on the 7th, and the House on the 8th.

MAR 3 1913

NEWSLETTER

OF THE

OFFICE OF GRAIN INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S DEPARTMENT OF AGRICULTURE

AUG 24 1912

Volume IV

1912.

August 23, 1912.

GENERAL NOTES

In the appropriation bill for this year the designation of this Office is changed from "Grain Investigations" to "Cereal Investigations".

Circular No. 97, entitled "A Preliminary Report of Rice Growing in the Sacramento Valley", by Mr. Chambliss, was issued on the 16th instant.

Page proof of Farmers' Bulletin 507, entitled "Smuts of Wheat, Oats, Barley, and Corn", by Mr. Johnson, has been received and it is probable that the publication will be ready for distribution at an early date.

OFFICE NOTES

Mr. Chambliss left on August 14 for an extended trip through the rice district of Louisiana and Texas. He will also visit points in California where experimental work with rice is being conducted.

Mr. Ball is expected to return to Washington from his Western trip about the 24th instant.

STATION NOTES

VIRGINIA:

Arlington Farm Cereal Work. The wheats have been thrashed and recleaned. Several varieties yielded nearly 40 bushels per acre, Dawson's Golden Chaff, Dietz, and Purple Straw being among the highest-yielding varieties. Buchwheats, prosos, and foxtail millets are now being harvested. The red-flowered variety of buckwheat seems unusually promising. The yield of sorghum grain will be seriously diminished by sparrows eating the flower buds and immature grains. This is the first instance of injury of this kind noted here.

TEXAS:

Amarillo Cereal Field Station. August 17. Fine rains during the early part of August put the crops in good condition.

Kowliangs Nos. 261 and 328 are ripening. The later varieties are heading nicely.

The Beaumont Cooperative Rice Experiment Farm. Construction of the laboratory will be commenced the latter part of August and it is expected that work on the seedhouse and barn will be commenced immediately after the completion of the laboratory.

The first of the rices headed July 26, and the remainder were flowering on August 11. All the rices in the nursery are doing well. The crops were threatened for a time by grass-worms. Rains, however, destroyed the worms and this danger has been averted.

KANSAS:

Hays Branch Experiment Station. Total precipitation for July was 0.88 inch, most of it coming in showers of less than 0.1 inch. From August 1 to 11 precipitation amounted to 2.38 inches. The ground is wet below the depth of plowing and is in good condition to work.

Sorghums are looking well. Kowliangs are in full head, and milo, dwarf kafir, durra, and dwarf broomcorn are all heading.

MINNESOTA:

St. Paul. August 9. Weather reported cold and rainy during early part of the month. Grain ripening slowly and hard to care for when ripe.

SOUTH DAKOTA:

Highmore Substation. August 12. Harvesting still occupies all our time. The nursery work is very satisfactory. Harvest of oats and barleys finished, except head rows. Yields are excellent considering the adverse climatic conditions during the growing season. Some of the new varieties of barley and oats

promise to outyield the present standard varieties.

Unless rain comes soon the foxtail millets will be a failure. Corn also is much injured. The grain-sorghums, however, are doing well.

August 19. Practically all the field and nursery plats are harvested except about one-half of the head rows, the late plantings of grains received from the Office of Cereal Investigations, the sorghums, and foxtail millets.

Precipitation amounting to 2.13 inches occurred from the 16th to 19th, leaving the ground in excellent condition.

NORTH DAKOTA:

Williston Experiment Substation. All the grain crops at the station were harvested by August 17, except the flax and proso. The field plats of barley have been thrashed, the average yield being over 50 bushels per acre, the highest yield (Minnesota No.6) being 74 bushels. General harvest of wheat and oats outside the station is just commencing. Winter wheats were seeded on the 17th. There is sufficient moisture in the soil to insure germination.

IDAHO:

Aberdeen Experiment Station. Mr. Aicher reports heavy rain on the 14th. First seeding would have been done on the 15th had not rain prevented.

CALIFORNIA:

Biggs Cereal Field Station. August 19. Rice fields around Biggs and Richvale look well but there has been little noticeable growth during the last ten days. Some of the fields will probably not head for at least two weeks.

OREGON:

Eastern Oregon Dry-Farming Station (Moro). Total precipitation for month of July, .01 inch on the 30th. Precipitation August 1 to 16, .41 inch, occurring on the 14th, 15th and 16th.

Temperature for July and the first half of August, moderately cool, the only hot period of any duration being from July 15 to 19 when the maximum temperature ranged from 91 to 98 degrees. Coolest day the first half of August was the 16th, maximum temperature being 59 degrees; minimum, 44 degrees on the 15th.

The wind movement was not great during July and the first half of August. The highest number of miles recorded during any 24 hours was 299 on the 21st.

A comparatively cool ripening period allowed the grains to fill well. Considerable Turkey wheat in this vicinity has "yellow berry", as a result. The winter wheat at the station, most of which was on shallow ground, has practically no "yellow berry" in it, but much of it is shrunken.

The highest-yielding winter wheats were Kharkov, G.I.No.1442, 31.16 bushels per acre; G.I.No.1355, 30.33 bushels per acre; and "Prohibition", a local variety, 27.8 bushels per acre.

The highest-yielding winter barleys thrashed so far were Hannchen, G.I.No.531, 32 bushels per acre; and Tennessee Winter, 28 bushels per acre. There are a few plats of barley which are not yet thrashed.

Our spring wheats and barleys will give a fair yield, though not so high as those sown in the fall.

All of the winter wheat varieties and most of the winter barley varieties have been thrashed and about 475 bushels of the field winter wheat. The only grains not yet cut are the spring wheat varieties, a few acres of oats, and about six acres of field spring wheat.

MAR 2-1913

NEWSLETTER

OF THE

OFFICE OF GRAIN INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S DEPARTMENT OF AGRICULTURE

SEP 7 1912

Volume IV

1912.

September 7, 1912

GENERAL NOTES

All field men are expected to mail on Saturday night, if possible, a brief weekly report of weather conditions, condition of crops and operations under their charge.

The recent appropriation for Sundry Civil Expenses of the Government contains provision that postmasters, assistant postmasters, collectors of customs, collectors of internal revenue, chief clerks of the various executive departments and bureaus, the superintendent, custodian, and principal clerks of the national parks, etc., are required when requested by Government employees, to administer oaths without charge, and such service will have the same force and effect as though performed by an officer having seal.

After July 1, 1912, no jurat fee in expense accounts shall be reimbursed by the Department of Agriculture.

Where proper blanks are inclosed with this letter, please send to this Office data necessary for preparation of authorization covering trip to Washington. Give approximate duration of stay in Washington when known so that authorizations can cover return trip when interval in Washington is short.

OFFICE NOTES.

Dr. C. E. Leighty, formerly of the Office of Grain Standardization and for the past three years our collaborator at Cornell University where he has taken his doctorate, was appointed Expert in this Office on September 1. He will conduct studies in principles of inheritance and will have charge of wheat investigations in the humid area.

Mr. Jenkin W. Jones was appointed Agent in this Office on September 1. His headquarters will be in Wyoming.

FIELD NOTES

VIRGINIA:

Arlington Farm Grain Work. September 6. Thrashing and grain-cleaning completed. Seeding of winter oats will be finished the latter part of this week and winter barley next week.

September 7, 1912.

LOUISIANA:

Crowley Rice Experiment Farm. Farmers are harvesting but are greatly inconvenienced by the unfavorable weather prevailing. Most of the rices in both nursery and increase plats are heading and many maturing.

About 250 farmers attended the exercises on Field Day, August 20, and showed much interest in what is being done.

TEXAS:

Amarillo Cereal Field Station. August 31. All milos ready to harvest the first week in September. Weather very dry. Sorghums ripening but drying up at a rapid rate.

KANSAS:

Hays Branch Experiment Station. September 2. Weather hot and dry, the effect of which is beginning to show on the sorghums.

Rain amounting to .36 inch on the 31 was followed by high temperature and wind which reduced the good effects on the grains.

Plowing has been somewhat difficult but is nearly finished. Tillage operations are later than usual as it was impossible to plow until after the August rains. Fallow has been worked.

Sudan durra in full head and will be ripe about the 10th; the early plats of Manchu kowliang, G. I. Nos. 361 and 328, were ripe on the 29th, and G. I. No. 171 on the 31st.

Two silos are in process of construction. The college students are returning to school and several laborers have left. The station is, therefore, short-handed. Thrashing is still being done extensively in the county and labor is hard to obtain.

Professor Ten Eyck's resignation has been received, effective January 1, with leave from October 1.

COLORADO:

Akron Experiment Farm. August 29. Weather conditions fine. Thrashing in the nursery is progressing nicely. Field thrashing has been delayed owing to the necessity of repairing engine.

September 7, 1912.

SOUTH DAKOTA:

Highmore Substation. August 24. Seasonal conditions are ideal for early plowing, thrashing, and hay-making. Rain during the past week revived the foxtail millets to such an extent that a fair crop is expected, although the ends of the heads will remain dried. All harvesting will be completed by the end of this week with the exception of foxtail millets and grain sorghums. These are very promising. A large acreage of winter rye is being seeded in this locality.

Precipitation amounting to 1.05 inches occurred on the night of the 29th.

NORTH DAKOTA:

Dickingon Experiment Substation. August 31. Fall planting has been completed. Spring crops are making good recovery from effects of hail storm but it is doubtful if there will be sufficient grain for thrashing. If seed matures, if possible, heads enough for planting next year will be picked. Oat varieties have a fine stand but do not ripen. Unless better weather conditions obtain within the next week, no attempt will be made to do any thrashing with the large machine. The tri-local experiments with Sixty Day oats and Minnesota No. 25 flax will be thrashed in the small machine and entire data secured. The oats have already been cut.

Williston Experiment Substation. August 31. Conditions favorable for harvesting and thrashing. All xxxxxxxx thrashing at the station completed August 30, with the exception of flax. Average yield of 19 varieties of wheat is 45 bushels per acre; Kubanka (G.I.No.1445) and Spring Ghirka (G.I.No.1517) are in the lead, averaging 51 and 51.7 bushels per acre, respectively. In a five-year average Kubanka leads with 24.5 bushels, Powers' Fife following with 24 bushels. Spring Ghirka has only been grown for three years and, in the average for this period, stands first with 28 bushels per acre; Powers' Fife second, 24.3 bushels, and Kubanka fifth, 23.6 bushels.

The average yield of oats this year is 95.5 bushels, the highest being Banner (a side oat) with 120.6 bushels, with Selected Tartarian a close second, yielding 118.8 bushels, and Golden Cluster, Siberian White and Hvitling (G.I.No.491) from Svalof, Sweden, following with 180.2, 106.9, and 105 bushels, respectively.

The average yield of barleys (22 varieties) is 60.1 bushels per acre. Field plats of emmer produced 79.5 and 78 bushels per acre; Spring rye 43.6 bushels.

One plat of winter wheat, Beloglima (G.I.No.1543), seeded in standing corn in the fall of 1911 (the only wheat which was not winterkilled), yielded at the rate of 38.1 bushels per acre.

From a recent trip throughout the vicinity surrounding Williston, Mr. Babcock reports that the crops in general were not so far advanced as in the valley at Williston, about one-third being green and liable to be considerably damaged should an early frost occur. Little barley was observed, but flax in large quantities, most of it green. Leaf rust on wheat was quite prevalent; stem rust slight. No covered or loose smut was observed on oats or barley.

OREGON:

Eastern Oregon Dry-Farming Station (Moro). August 31. Light rains occurred during the past week, sufficient to stop thrashing operations. If the rains continue much longer thousands of acres of standing grain in the county will be seriously damaged. It will take about seven days to complete thrashing on the station, and probably three weeks on the farms in the vicinity of the station.

MAR 3 - 1913

NEWSLETTER

OF THE

OFFICE OF GRAIN INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S DEPARTMENT OF AGRICULTURE

SEP 2 1912

Volume IV

1912.

NEWSLETTER

OF THE

OFFICE OF GRAIN INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S DEPARTMENT OF AGRICULTURE

Volume IV

1912.

September 20, 1912.

EXECUTIVE ORDER

"The temporary office of moderator of a town meeting and offices of a like character are hereby excepted from the operation of the Executive order of January 17, 1873, prohibiting persons in the Federal civil service from holding office under the charter or ordinances of any municipal corporation, and may be held by persons in the executive civil service. Membership in the civil service ought not to prevent an employee from taking part in the ordinary municipal affairs of the community in which he lives, where that part does not involve permanent service but only such a temporary duty as that of acting as chairman of a municipal business meeting, where such service is not compensated by any salary or other emolument, and where the attention required by such service does not interfere with the regular and efficient discharge of the duties of the Federal office held.

"In the exercise of the privilege granted by this order officers and employees must not neglect their official duties and must not engage in national, State, or county political activity in violation of the civil service rules; and in seeking the local offices named or in performing the duties thereof employees shall not use the authority or influence of their federal positions nor take an active part in political management or in political campaigns.

Wm. H. Taft,
The White House, April 8, 1912."

OFFICE NOTES

Mr. Alden A. Potter, Assistant Pathologist in Cereal Disease Work, returned to the Office September 16. He reports that experiments at Amarillo, Texas, and Manhattan, Kansas, were successful in clearing up obscure points in sorghum smut work.

Mr. Fred L. Ross, who has been assisting the Superintendent of the Amarillo Cereal Field Station, Amarillo, Texas, resigned on August 31 to attend the Kansas State Agricultural College.

Buffum's No.17 Winter wheat is G.I.No.3330. His Improved Winter emmer is G.I.No.3331.

FIELD NOTES

LOUISIANA:

Crowley Rice Experiment Station. September 9. Mr. Chambliss reports that there appears to be very little straight-head disease this season in the rice within a radius of fifteen to twenty miles north and south of the farm. Heat in this section very intense for the past ten days.

TEXAS:

Amarillo Cereal Field Station. September 7. Weather very dry. No rainfall since August 5, with exception of very light showers on the 4th. The soil is very dry and the crops suffering as a result.

Some of the kaoliangs and milos have been harvested, while others are about ready. Also, some of the durras are nearly ready. Harvest of all milos, dwarf milos and early kaoliangs expected to begin about September 15.

September 14. It has been raining for the past three days and the previously very dry soil is now quite muddy. Precipitation about 1.77 inches. This will put the ground in fine shape for fall seeding and also make plowing possible. The earlier grain-sorghums are too far advanced to be helped by this rain, but the later kafirs may profit by it.

KANSAS:

Hays Branch Experiment Station. September 14. Nearly all kaoliangs and durras have been harvested, and broomcorns are now in process of harvest. Early planting of dwarf broomcorn has been very badly damaged by drought, but the later plantings are expected to show better quality. The brush is infested with lice. Dwarf Standard has made a very fair yield and shows very fine brush. Standard brush is also very fair.

September 20, 1912.

There has been a very severe epidemic of spinal meningitis among the horses in central west Kansas and a great many have died. Losses have been heavy in this vicinity, but so far the station has escaped loss of this kind.

The labor question is becoming serious. Help is getting more and more scarce. Men, especially college students, are leaving rapidly and the station is very short-handed.

Rain fell continually throughout the week of the 9th and it is expected that the weather will continue cool.

COLORADO:

Akron Experiment Farm. September 14. Grain-sorghums as a whole have made a very slow growth this season and it is feared that only a few will produce seed unless frost is later than expected. Dwarf broomcorn is quite badly injured by the dry weather during the latter part of August.

Weather during the week has been very damp and cool. Snow fell on the night of the 13th. Showers during the week were very light.

Nursery thrashing is practically completed. Some thrashing has been done in the field, and the yields and quality of grain have been very good. Thrashing has been delayed to some extent by wet weather, and the necessity for repairing the engine.

- Yields -

WHEAT					
Ghirka Winter	G.I.No.1438	38.3	bu.	per	acre
Turkey	1571	42.6	"	"	"
Malakof	2908	35.0	"	"	"
Kharkov	1442	33.1	"	"	"
EMMER					
Spring*	1542	26.6	"	"	"

* Average, 3 plats.

Fall planting of winter grains is expected to begin during the week of September 23. This planting is later than usual, owing to the delay in thrashing.

SOUTH DAKOTA:

Highmore Substation. September 14. All winter grains have been planted. Where moisture is sufficient they are up and doing nicely. Grain-sorghums are ripening slowly. Foxtail millets are ripening; the millet used as checks has been harvested.

Weather continues cool and cloudy with indications of frost early in the week.

Bellefourche Experiment Farm. September 14. Damp, rainy weather has prevented thrashing during the past week. Total precipitation during the week 1.07 inches. A severe hailstorm visited the farm on the 13th, doing considerable damage to the garden, flax in the shock, and to the grain-sorghums and broomcorns. As most of the corn was practically mature, no material damage resulted except to the fodder.

Nearly all the plat thrashing with the exception of the flax has been completed.

Winter wheat was sown on August 31. This is the earliest seeding yet practiced except in the date-of-seeding tests and was thought advisable this year because of the plentiful supply of moisture. The wheat germinated quickly and a good stand resulted. Good stands were also secured in date-of-seeding plats sown August 6, 16, and 31.

NORTH DAKOTA:

Dickinson Experiment Substation. September 14. Weather conditions were ideal up to the 12th. Maximum temperature for the month, to date, 95 degrees; minimum, 36. Precipitation, .1 inch.

Oats and barley made a very good second growth after the severe hail storm which visited the farm in July. Good yields are expected from the oats, but they are badly rusted and may disappoint. Barley is about the same as last year. The second growth wheat is poor and does not mature, a number of the varieties not filling. Red Fife, G.I.No.3081, made the best recovery. Grain from 100 head selections of this variety will be saved. Oats and barley on the nursery plats have been cut and partly thrashed.

Thrashing in the vicinity is well under way, notwithstanding the shortage of help. Station thrashing was started on the 12th, but was interrupted by rain which has continued during the past two days.

Williston Experiment Substation. September 14. The past three days have been too damp for thrashing and the indications are that there will be a killing frost tonight, although none has yet occurred.

Most of the flax in the surrounding country is ripe. The field plats of flax on the station were thrashed this week. Bolley's Immune, (No.52), yielded 30.0 bushels, and the lowest yielder, Minnesota No.25, G.I.No.12, yielded 19.7 bushels.

IDAHO:

Aberdeen Experiment Station. Mr. Aicher reports having found a field of several hundred acres of Turkey wheat of absolutely pure seed of which the average yield was 35 bushels per acre. All wheat is yielding heavily this year, but the quality is not so good.

Difficulty is being experienced in securing seed for fall planting, owing to the delay in thrashing operations on the various stations.

September 12. Weather very cold. Frost has occurred two nights and put a stop to growth of such crops as are easily affected by low temperature. Over 3 inches of rain fell during August, and the grain which had been cut lost much of its luster. Summer fallow is in excellent shape for seeding as a result of this precipitation.

Thrashing has been completed. The delay was due to inability to get an engine to operate the thrasher. Most of the grain thrashed was grown on the irrigated section of the farm. The quality of the grain is better than the seed planted. Yields are not so good as are to be expected from irrigated land, but this was largely due to the lateness of the first application of water.

Date-of-seeding tests began over two weeks ago. It is expected that all seeding will be completed by the end of next week.

MAR 9 - 1913

NEWSLETTER

OF THE

OFFICE OF CEREAL INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

October 4, 1912.

Volume IV

1912

October 4, 1912.

GENERAL ORDER NO. 159.

Attention is invited to the following provision in the Act, approved August 24, 1912, making appropriation for Sundry Civil Expenses of the Government for the fiscal year ending June 30, 1913, and for other purposes:

> "Sec. 10. That section eight of the District of Columbia appropriation Act, approved June twenty-sixth, nineteen hundred and twelve, shall not take effect or be operative during the fiscal year nineteen hundred and thirteen except to the extent that it prohibits the payment of membership fees or dues in societies or associations:
> Provided, That during the fiscal year nineteen hundred and thirteen expenses of attendance of officers or employees of the Government at any meeting or convention of members of any society or association shall be incurred only on the written authority and direction of the heads of executive departments or other Government establishments or the Government of the District of Columbia; and a detailed statement of all such expenses incurred from June thirtieth until December first, nineteen hundred and twelve, shall be submitted to Congress on or before January first, nineteen hundred and thirteen."

In conformity with the foregoing provision, expenses of attendance of officers or employees of the Department of Agriculture at any meeting or convention of members of any Society or Association may be incurred, during the fiscal year nineteen hundred and thirteen, only on the written authority and direction of the Secretary, but will not include the payment of membership fees or dues in Societies or Associations. Chiefs of bureaus, independent divisions and officers, will submit their recommendations to the Secretary in each case with full explanation as to necessity, and if approved a formal letter of authorization will be issued to cover the trip.

All previous orders and letters of authorization in conflict with the above are hereby revoked.

W. M. Hays, Acting Secretary.

October 4, 1913.

OFFICE NOTES

Mr. Ball will leave the Office Monday evening, October 7, for an inspection of the southwest experiment farms and conferences with station officials, his itinerary being:

October 10, Crowley, La., Pizzini Hotel,
" 11, a.m., Beaumont, Texas, Crosby Hotel,
" 13, Amarillo, Texas, Amarillo Hotel,
" 14, a.m., " " " "
" 16, Hays, Kansas, Ft. Hays Branch Station,
" 17, a.m., Manhattan, Kansas, Gillette Hotel,
" 20 to 24 inclusive, Lethbridge, Alberta, Canada, c/o International Dry Farming Congress.

Dr. Harry H. Love of Cornell University has been appointed a collaborator with this Office in its cooperative work in the breeding of cereals with the Cornell University Agricultural Experiment Station.

Mr. Edward C. Johnson, Pathologist in Charge of Cereal Disease Work, resigned on September 30 to become Superintendent of the Farmers' Institute work in the State of Kansas, with headquarters at the Kansas Agricultural College, Manhattan.

Mr. Chambliss is now in California and is expected to return to the Office about October 15, by way of Beaumont, Texas, and Crowley, Louisiana.

Mr. Derr has returned from a short trip into Maryland.

First galley proof of Mr. Ball's kaoliang bulletin has been received.

Among those who passed examinations taken last spring the following have been promoted in salary and given the title of Scientific Assistant in Agronomy:

Aicher, L. C.	Aberdeen,	Idaho
Clark, J. A.	Dickinson,	North Dakota
Donaldson, Noble C.	Moccasin,	Montana
Jones, Jenkin W.	Cheyenne,	Wyoming
Kiene, F. A., Jr.	Hays,	Kansas
Morrison, Joe D.	Highmore	South Dakota

October 4, 1912.

FIELD NOTES

VIRGINIA:

Arlington Farm Cereal Work. Nursery and field plantings of winter oats and barley have been completed. Seeding was delayed considerably due to continued heavy rains.

TEXAS:

Amarillo Cereal Field Station. September 28. All milos and practically all kaoliangs are harvested. Of the kafirs, only White Nos. 342 and 370 are harvested. The other varieties will probably be ready in a week or ten days. Thrashing of kaoliangs and milos expected to begin next week.

KANSAS:

Fort Hays Branch Experiment Station. September 29. Weather cold for the past week, with two frosts. No rain, though cloudy weather predominates. No further cases of spinal meningitis, lately so prevalent among the horses in this district. Cholera has appeared to a considerable extent among the hogs and it is feared that a large number of the 400 on the station will be lost. Seeding is expected to begin October 1.

COLORADO:

Akron Experiment Farm. September 21. Weather all this week has been cold and windy; no thrashing has been done on account of the weather and the condition of the grains as a result of the snows of the previous week. Quite a little corn and forage sorghums have been harvested. Frost occurred on the night of the 20th, killing all grain-sorghums. The only varieties which matured any amount of seed were White kafir, No. 370, and Manchu kaoliang, No. 328. In the early planting of No. 370, probably three-fourths of the heads matured while in the later planting but a few heads matured. Good selections of No. 328 can be obtained. No seed can be saved from the Blackhulled kafirs, Nos. 340 and 422, and but few selections from White durra, No. 81, and White sorgo, No. 350, and Dwarf milo, No. 149. A large percentage of the brush of broomcorns seems to be too tender to jerk, the brush breaking loose from the stalk.

October 4, 1912.

The head selections of winter grains were planted this week. Ground is in fine condition owing to late rains, and it is hoped the nursery will get a good start before very cold weather sets in. No winter seeding has yet been done.

Prof. C. V. Piper and Mr. Lisle Morrison visited the station on the 18th.

September 28. Weather during past week rather cold. On Tuesday there was a small blizzard, the wind being quite high and bringing snow with it most of the time. Tuesday night the weather cleared and there was a hard freeze, temperature registering 22 degrees and killing all crops not already frosted on September 20.

Thrashing was continued on the 23d and 26th, completing nearly all of the winter wheat varieties. Grain-sorghums were harvested on the 27th. Fall seeding is expected to begin on the 30th.

SOUTH DAKOTA:

Bellefourche Experiment Farm. September 28. Weather during month of September has been the wettest in the history of the station; the past two weeks were damp and rainy, almost entirely preventing the field work. A killing frost, the first of the season, occurred on the night of the 23d, damaging the kaoliangs and milos. Only the earliest of the Manchu kaoliangs matured seed, weather having delayed ripening.

No thrashing has been done for more than three weeks.

Highmore Substation. September 21. Precipitation for the past week, .41 inches. Frosts have been light and have done no damage. Work has been practically at a standstill owing to cold, wet weather.

All kaoliang selections have been harvested; also foxtail millets, which will give fair hields. Sufficient amounts of the grain-sorghums, with the exception of the milo, have matured to carry on the work in excellent shape next season. The Kafir-durra-kaoliang selection did not break up as anticipated, proving very promising, the yield being at the rate of 14.5 bushels per acre, with 1900 pounds of forage.

September 28. Work progressing nicely, but it has been impossible to thrash all grain-sorghums owing to cold, wet weather.

Mr. Manley Champlin, Collaborator of this Office, is planning to have some brooms made from the brush of the broomcorn grown at Highmore, if it is possible to save this brush in proper shape for this purpose with the limited apparatus available.

October 4, 1912.

NORTH DAKOTA:

Williston Experiment Substation. September 21. Temperature: Maximum, 77.0; minimum, 29.0. Precipitation, 0.59 inches. First frost of the season occurred this week.

Of the kaoliangs, only selections made last year from Manchu Brown, No. 328, have matured.

Very little thrashing is being done throughout the State on account of the weather. Only a small part of the nursery rows at this station are thrashed. Good progress is being made, however, with the small hand thrasher made according to the suggestions of Mr. F. D. Farrell, formerly of the Office of Cereal Investigations, in addition to which a fan has been devised which permits thrashing and cleaning at the same time.

Dickinson Experiment Substation. September 21. Precipitation for past ten days, 1.62 inches. Light frosts have occurred several nights.

Condition of weather and the scarcity of help have made it practically impossible to complete all thrashing. Thrashing of oats and of some of the barleys and flax has been completed. Yields are good. The highest yielders: Oats, Banner (a side oat), 65 bushels per acre; barley, Hanna, 46 bushels per acre. The tri-local continuous flax plot yielded 9.1 bushels per acre. The plot from Minnesota seed was very late in maturing having been cut only the first of the week and the seed is very poor.

September 28. Precipitation during the week, .13 inches. Temperature: Maximum, 51.5 degrees; minimum, 25.5 degrees. The weather has been cloudy most of the week, but thrashing has progressed fairly well. This section escaped the heavy precipitation in the eastern part of the State during the past week; also the heavy fall of snow reported at Fargo, Dickinson, and even as far west as Minot.

Mr. J. A. Clark, accompanied by his wife, arrived in Washington September 29, to remain here during the winter months.

MONTANA:

Judith Basin Substation (Moccasin). Some flax has been harvested and the balance will probably be ready for harvest in a week or ten days. A portion of the Sixty Day oats made a second growth, were thrashed, and yielded about 40 bushels per acre. (September 19).

October 4, 1912.

WYOMING:

Cheyenne Experiment Farm. Mr. Jenkin W. Jones, recently appointed, arrived at Cheyenne on the 21st to take charge of the work on the new cooperative experiment farm near Cheyenne. He reports that about 12 acres had been broken and the breaking of an additional 50 acres is now under way. Some varietal plantings of winter cereals have been made, and rate-of-seeding and date-of-seeding tests were expected to be begun soon. Fencing will begin promptly after seeding is finished.

UTAH:

Nephi Experiment Station. Cold, dry weather is greatly delaying planting. Everything is thrashed and planting will begin as soon as the weather permits.

OREGON:

Eastern Oregon Dry-Farming Station (Moro). August 18 to September 22. Evaporation and Precipitation: During the latter half of August we had .33 inch precipitation, which fell for four days, August 26 to 31, the highest amount for any one day being .23 inch, on the 23d. It also rained from September 2 to 7, the total for the period being .18 inch, making a total of .41 inch for the last week in Augugt and the first week in September. As cool weather has prevailed during most of the period, the evaporation has not been excessive.

Temperature: During the rainy period in *August and September the weather was exceptionally cool, the highest maximum temperature recorded between August 27 and September 8 being 65 degrees. The highest temperature recorded since August 18 was 97 degrees, on August 23. The lowest temperature recorded was 29.5 degrees, on September 20.

Yields: Spring wheat. Washington Club, highest yielder, 22.66 bushels per acre; Washington Bluestem, a close second, 22.16 bushels per acre. Several plats of the latter on the tillage plats exceeded 24 bushels per acre. Spring oats. Highest yielding plat, Black American in the rate-of-seeding test (10 peck seeding) gave a yield of 48.43 bushels per acre. In the variety test, a twentieth acre plat of Shadeland Climax, a variety sent here by Professor Scudder from the Portland Seed Company, gave the highest yield, 44.4 bushels per acre. One plat of Sixty Day oats yielded 40 bushels per acre. Kherson was second, with 39.6 bushels.

October 4, 1912.

Spring barleys: Swan Neck gave the highest yield, 31.5 bushels per acre. Mariout, C.I.No.261, was second, having a yield of 28.1 bushels. Hanna and Chevalier also gave good yields, each variety going about 26 bushels per acre. Winter emmer: Black winter emmer, C.I.No.3337, gave a yield of 41.7 bushels per acre. Buffum's Improved winter emmer, 40 bushels per acre. Field pea varieties: These varied in yield from 4 to 19 bushels per acre. Three varieties exceeded 15 bushels per acre. The highest yielding variety was S.P.I.No.12887, 19.29 bushels per acre.

Thrashing, which began early in July, was completed only last week. The rain which delayed thrashing operations in eastern Oregon for nearly two weeks, did little damage in this county. The quality of the wheat which was not cut before the rain was but little injured and practically all of it will grade No. 1. All thrashing in the county is finished and the farmers are busy hauling to market one of the biggest wheat crops raised in eastern Oregon.

On September 12, our earliest seeding on the rate- and date-of-seeding test with winter wheat was planted. So far as I am able to learn none of the farmers have begun seeding winter wheat on their farms in this county. A few expect to start this week, but most of them will wait for several weeks or until the fall rains begin.

Mr. Chambliss of the Office of Cereal Investigations and Professor Scudder of the Oregon Agricultural College inspected the station last week.

MAR [illegible] 1913

NEWSLETTER

OF THE

O F F I C E O F C E R E A L I N V E S T I G A T I O N S

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

October 18,

Volume IV

1913.

October 18, 1912.

OFFICE NOTES

Farmer's Bulletin No. 507, "The Smuts of Wheat Oats, Barley and Corn" by Mr. E. C. Johnson, was issued on the 8th instant, and copies have been sent to all our men at field stations.

Mr. Harlan is growing his barley hybrids (F-1 generation) in the greenhouse to save a year's time. It is Mr. Potter's intention to grow wheat hybrids in the same way and Dr. Leighty and Mr. Warburton are planning to plant in the greenhouse wheat and oat varieties for hybridizing.

Mr. Chambliss returned from a trip through the South and West on the 14th.

Mr. Derr left on the 11th instant for Lethbridge, Canada, where he is to take charge of the installation and demonstration of the Department cereal exhibit at the International Dry Farming Congress. His assistants in this work from this Office will be Messrs. Aicher, Babcock, and Donaldson.

Mr. Louis Wermelskirchen has been appointed Scientific Assistant in Agronomy in this Office, to take effect October 1, 1912.

The Office has been fortunate in again securing the services of Miss Campbell as temporary stenographer during the winter months.

Mr. Harlan is expected to return to Washington for the winter early next week. Messrs. Morrison, Donaldson, Rothgeb, Wermelskirchen, and Salmon expect to be in Washington early in November.

FIELD NOTES

LOUISIANA:

Crowley Rice Experiment Station. October 11. Harvesting has been completed. Good rice yields are reported in the vicinity of Crowley. Some of the crops, however, were badly infested with red rice.

October 18, 1912.

COLORADO:

Akron Experiment Farm. October 5. The weather during the past week has been almost ideal. A light snow fell September 29 and a heavy frost occurred that night.

Fall seeding of varieties was completed October 1. With the exception of the date-of-seeding tests all fall seeding is completed. The seed bed was in excellent condition.

Head selections in the winter nursery came up September 30 to October 2 and are growing nicely.

Winter and spring wheat varieties have all been thrashed, and all but two plats of spring barley. The highest-yielding wheats were:

Winter -	Turkey,	G. I. No.	1571,	43.15 bushels
	Ghirka,	"	1438,	38.33 "
Spring -	Arnautka,	"	1494,	37.33 "
	Gharnovka,	"	1447,	36.50 "

The average yield of the durum spring wheats is higher than that of the common spring wheats.

The highest-yielding barleys were:

Hannchen,(H.S.D.)	G. I. No.	531,	56.6 bushels
Hannchen,	"	602,	46.6 "

If good weather continues, thrashing will soon be completed. Most of the small grain in the neighborhood has been thrashed and good yields were reported in many cases.

SOUTH DAKOTA:

Bellefourche Experiment Station (Newell). October 12. Favorable weather during the past week. Thrashing of nursery rows and flax completed. Flax proved to be the most profitable dry-land crop grown at the farm this year. The yields ranged from 9 to over 14 bushels per acre.

Field work is now completed except seeding of winter wheat in the time-of-seeding test.

Highmore Substation. October 10. Weather conditions have been excellent during the past week.

A large part of the grains in C, D, and E classes has been cleaned. The best yields of grain-sorghums were as follows:

Kaoliang,	G. I. No.	261,.....	18.8 bushels
"	"	171,.....	25.4 "
White sorgo,	"	350,.....	11.6 "
Kafir-durra,	"	198-15-3,.....	26.4 "

Reports from different portions of the state indicate that there is considerable interest in development of sorghums as grain crops.

October 18, 1912.

Winter grain plantings at the Station are doing well and, with a few exceptions, the stands are excellent.

NORTH DAKOTA:

Williston Experiment Substation. October 12. The weather has been rainy the past week with snow on the 9th.

All nursery thrashing finished on the 10th. The hand thrasher did excellent work.

MONTANA:

Judith Basin Substation (Moccasin). October 4. Weather for the past two weeks has been quite stormy and cold so that thrashing could not be continued.

The late flax and the plat of winter emmer will be cut as soon as the weather clears.

The selections of Swedish Select oats in the nursery rows have ripened and are ready to cut.

Owing to the cold, wet weather the winter wheat has not made as good growth as usual.

IDAHO:

Aberdeen Experiment Station. October 4. Snow precipitation of 0.65 and still snowing. The moisture coming at this time is of much value.

Practically all of the grains which were planted up to September 26 are looking fine.

CALIFORNIA:

Biggs Cereal Field Station. Three buildings are now being erected on the station-- barn, implement, and seed house; superintendent's residence; and foreman's residence.

The farm (fifty-six acres) is being plowed preparatory to planting a portion of it to rice next spring. It is possible the other grain work for this season will be continued at Chico.

October 18, 1912.

OREGON:

Eastern Oregon Dry Farming Station (Moro).
October 3. Weather cool and dry. There is not enough moisture in the ground to start the winter grain so seeding will have to be delayed a week or ten days.

Hauling in of the straw is finished and the wheat is being taken to the warehouse. There will be for sale about 700 bushels of field wheat.

The nursery is still unthrashed.

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MAR 1913

NEWSLETTER

OF THE

OFFICE OF CEREAL INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

1912

NOV 4 1912

Volume IV

1912.

November 4, 1913.

GENERAL NOTES

The monthly financial statements from the Office of Records, which have proved so useful in the past, have been discontinued for this fiscal year.

When possible, always ascertain the amount to be charged for freight and express shipments and note same on memorandum bill of lading which should always be mailed direct to this Office for transmittal to the Disbursing Office. This will greatly aid the Office finances since otherwise an estimated (and usually much larger) sum is deducted from our funds until the bill is received from the railroad or express company, which may be months later.

All stubs of transportation requests should be mailed to this Office as soon as transportation is issued to be transmitted to the Disbursing Office after records have been made here; also all unused transportation requests, whether spoiled or perfect, the spoiled ones at once and the perfect ones at the close of the fiscal year.

OFFICE NOTES

Mr. Ball returned to the Office on October 26 from a trip during which he visited points in Louisiana, Texas, and Kansas, as well as the International Dry Farming Congress at Lethbridge, Canada.

Mr. Cory has resigned from the Department, taking effect October 31, and accepted the position of Superintendent of the Lubbock Substation, Lubbock, Texas, under the Texas experiment station.

Messrs. Derr, Aicher, Babcock, and Donaldson, left Lethbridge, Canada, October 29, where they had been assisting in the installation of the exhibit of cereals. Mr. Cardon had charge of the Utah exhibit, which was an exceedingly creditable one.

Mr. Derr returned to Washington November 1. He reports that from the standpoint of number of exhibits and attendance the exposition was a success.

The entire Government exhibit attracted considerable attention from a number of visitors, including scientific people. The manner of mounting the cereals was especially interesting to college and experiment station workers.

The United States exhibit recently shown at Lethbridge is to be loaned to the United States Dry Land Show to be held in Chicago November 22 to December 8.

STATION NOTES

VIRGINIA:

Arlington Farm Cereal Work. Weather conditions very favorable to seeding and early growth of grains. Frost last night was beneficial to the young oats and barley. The seeding of wheats has been completed. A kind of aphis, or wheat louse, is affecting the young wheat, damaging the crop to some extent, but not seriously as yet.

LOUISIANA:

Crowley Rice Experiment Station. October 21. Owing to the rainy weather the latter part of last week thrashing was interrupted but, with the return of fair weather, was commenced again this morning. There are still a few of the nursery rices to be harvested, and several of the Philippine rices. The yields from late rices were rather late and disappointing.

On a short trip recently only one field of unthrashed rice was seen. It was interesting to note that a number of farmers were making hay from lespedeza and on one farm hay was being made from mixed lespedeza and grass.

TEXAS:

Amarillo Cereal Field Station. October 22. Weather very dry; cold north wind on the 21st, with clear sky. No killing frost to date.

November 4, 1912.

Harvesting and thrashing will be completed by November 1, as well as most of the seeding.

KANSAS:

Ft. Hays Branch Station. October 18. Weather cool and pleasant. Thrashing of 75 tenth-acre plats of grain-sorghums to begin October 21. All grain-sorghums but milo made fair crops.

Six-rowed barleys lead in yield.

Name	G.I. No.	Yield per acre
Stavropol,		28.3 bushels
California Feed,	690,	24.1 "
Beldi,	190,	22.7 "
Gatami,	575,	20.2 "
Mariout,	261,	19.3 "
Ouchac,	658,	17.9 "

The last-named variety was the only one not testing 48 pounds per bushel.

The weight of oats was very light, ranging from 20 to 25 pounds per bushel. This was caused by hot weather at the time of ripening which limited the ripening period. A Kansas strain of Kherson oats made the highest yield, 41.2 bushels per acre.

A grain header is being used in harvesting a 70-acre field of Dwarf Blackhull kafir, G.I. No. 340. The header seems to be a complete success.

COLORADO:

Akron Experiment Farm. October 29. Weather conditions excellent. Winter wheat continues to make good growth and will be in fine condition when cold weather sets in.

Grains from the variety tests are being cleaned. The new fanning mill is doing good work.

SOUTH DAKOTA:

Bellefourche Experiment Station (Newell). October 26. Weather conditions good during first two weeks, permitting seasonable field work.

Winter wheat has made rapid progress for this season of the year. The stand of all plats is uniformly good and the plants are vigorous. The prospects for good results another year are excellent.

Thrashing of nursery rows and flax was completed by October 12. Flax proved to be the most profitable dry land crop grown by this Office at the station this year. Yields ranged from 9 to over 14 bushels per acre which, at present prices, leaves a good margin for profit. Practically all ground to be used for dry farm grains another season has been plowed and harrowed to conserve the moisture.

Highmore Substation. October 28. The weather for the past week has not been very favorable as a whole; excessively high winds prevailed for three days. Cereal work at the station progressing nicely. Broomcorn and head-rows yet to be thrashed. It is interesting to note that, with few exceptions, Mr. Champlin's 1909 selections continue in the same relative positions as in 1910.

Mr. Morrison expects to leave for Washington, D.C., November 11.

WYOMING:

Cheyenne Experiment Farm. October 25. The station buildings on the old state farm have all been moved to the new cooperative farm at Archer and if weather conditions continue favorable fencing and breaking will be completed next week. Drilling for a well is in progress.

Mr. Jones expects to have the station work in shape so that he can leave for Washington, D.C., soon after November 10. He will stop en route at Akron, Colo., and Hays and Manhattan, Kansas.

CALIFORNIA:

Biggs Cereal Field Station. October 12. The weather during the past week has been almost ideal. Plowing under peas at the station was begun October 1, but the ground is now almost too hard to plow. Under the present conditions it is not thought

possible to complete the plowing by November 1. Most of the farmers in the vicinity are harvesting their rice crops and will probably finish by October 22.

OREGON:

Eastern Oregon Dry-Farming Station (Moro), October 28. Heavy frost last night, the temperature falling to 26°. Very few of the grain-sorghums will mature. There is hardly enough moisture in the ground to make conditions favorable to winter grains. Most of the fall seeding will be completed this week. The winter wheat, seeded September 12, is not yet up but will probably soon appear as there was 0.75 inch precipitation last week. The remainder of the seeding will be hurried as rapidly as possible.

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MAR 7 - 1913

NEWSLETTER

OF THE

OFFICE OF CEREAL INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

NOV 26 1912

Volume IV

1913

November 25, 1912.

The newsletter of the Office of Cereal Investigations will hereafter be issued semi-monthly instead of bi-weekly, the next issue to bear date of December 16.

OFFICE NOTES

The grain exhibit prepared by this Office and shown at the Lethbridge Dry Farming Congress is now on view at the United States Land Show at Chicago, Illinois, which opened November 23 and continues until December 8. Mr. Derr left Washington on the 18th instant to install and demonstrate the same.

Dr. Leighty and Mr. Warburton attended the meeting of the Maryland Crop Improvement Association in Baltimore last Wednesday, the 20th.

Miss M. E. Holland is now employed in the Bureau of Biological Survey, by transfer effected Tuesday, the 19th.

STATION NOTES

VIRGINIA:

Arlington Farm Cereal Work. Weather conditions continue fair for fall sown grains which are growing nicely. Dr. Leighty reports that Toxoptera graminum, the green bug which often causes considerable damage in the Western States, has been found in limited numbers on the wheat plants. Macrosiphum granaria, a green bug not so destructive, is present in considerable numbers.

LOUISIANA:

Crowley Rice Experiment Station. November 7. All rices have been harvested and thrashing completed. It is expected that the work of plowing and marking off plats for next year's work will be completed at an early date.

November 25, 1913.

TEXAS:

Amarillo Cereal Field Station. November 16. High winds and cold weather have prevailed, though no freezing has occurred. The last of the date-of-seeding tests has been sown.

KANSAS:

Ft. Hays Branch Experiment Station. November 9. Weather now very warm, after several hard freezes. Generally speaking, the weather has been ideal for fall work.

Thrashing and cleaning of grain-sorghums have been completed with the exception of broomcorn which will be thrashed next week.

The use of the grain header in harvesting a 70-acre field of Dwarf Blackhull kafir originated by this Office was completely successful. The heads kept well in the stack until thrashed.

Plenty of moisture in the fallowed ground is producing good stands of wheat, which is in good condition with the exception of the damage done in the field by the grasshoppers eating strips from 25 to 50 feet wide. Damage to the plats was controlled to some extent by use of the hopper-dozer and by poisoning.

All field work for the season is completed, including the planting of winter grains. Yields are being computed and the report brought to date in readiness for use in Washington during the winter.

SOUTH DAKOTA:

Highmore Substation. Mr. Morrison arrived in Washington on the 21st just for the winter months.

Bellefourche Experiment Station (Newell). Mr. Salmon is en route to Washington and is expected to arrive early this week, after making stops at Brookings, South Dakota, and Chicago, Illinois.

November 25, 1913.

NORTH DAKOTA:

Williston Experiment Station. Mr. Babcock reports his safe return on October 29 from Lethbridge, where he attended the Dry Farming Congress. Snow on the 28th but at the station melted as it fell. It is reported on every side of Williston that the snow lay from 3 to 6 inches deep. Heavy frosts occurring each night disappear before noon next day.

Thrashing in this vicinity progressing nicely, though there is still considerable to be done.

Computing yields, recording nursery rows, taking notes on collected plants, etc., now in progress.

MONTANA:

Judith Basin Substation (Moccasin). Mr. Donaldson arrived in Washington November 25 to spend the winter months.

WYOMING:

Cheyenne Experiment Farm. Mr. Jenkin W. Jones arrived in Washington on the 22d. He reports that about 66 acres of land on the new farm have been broken and all fencing has been completed. Grains seeded early in October are all up and looking fairly well. The barn, machine shed, and house are almost ready for use. A well has been drilled to a depth of approximately 175 feet.

COLORADO:

Akron Experiment Farm. November 3. The weather turned colder on October 30, snow falling on that day and the day following. The lowest temperature yet occurring was recorded on the night of the 31st, being 14 degrees. Total precipitation (snow fall) estimated at 3 inches.

All thrashing is completed. A few of the best yields are as follows:

November 25, 1913.

Bushels per acre

Buckwheat, Tartarian,.....32.3
Flax, North Dakota No.155,.....13.1
Proso, Tambov, South Dakota No.366,.....59.0

In the date-of-seeding experiments another planting was made on November 1, under difficulties, as the ground was quite wet and snow lay in the low places; however, the drill worked very well under the circumstances.

Some fall wheat is still being planted in this locality, though planting is mostly completed.

November 13. Another light snow fell on the 11th and the weather has been quite cold since. Frost killed the broomcorn before the brush was at its best, but such as was fit has been harvested.

Field work is all completed. Forage from the grain-sorghums was weighed and stacked during the week ending November 9.

UTAH:

Nephi Experiment Station. November 2. Precipitation (mostly snow fall) during the past week, 2.47 inches. Snow on the ground at present is about 6 inches deep but is melting and the weather is moderating. All grains were planted before the snow fell.

Mr. Cardon is en route to Washington for the winter months, planning to stop at the new farm in Cheyenne and at Manhattan, Kansas, arriving in Washington early this week.

IDAHO:

Aberdeen Experiment Station. November 14. Weather recently has been a continual round of freezing and thawing. It takes about half a day or, when cloudy, all day for the ground to thaw sufficiently to plow.

All the dry farm is in excellent shape for the winter. Ground intended for fallow next summer has been plowed and thoroughly disked and is to be left open for the winter. All plats requiring fall treatment have received it.

Grains have been retarded in growth due to a cold, wet fall, but most of the crops on the station are in good condition to pass through the winter.

The earlier seedings in the date-of-planting tests are doing the best at this time, although all the grains are either up or sprouted, which indicates a good stand for the spring.

Much of the grain planted in this district has not sprouted and the farmers fear it will not. Dry farm potatoes have done remarkably well this year, many farmers having secured yields of 60 and 70 sacks per acre.

OREGON:

Eastern Oregon Dry-Farming Station (Moro). November 16. Precipitation for month of October, .69 inch, .32 inch of which fell on the 24th and .23 inch on the 21st; for the month of November, to date, 1.3 inches. Temperature for the month of October was considerably colder than that for the same month last year, the maximum temperature being 69 degrees, and the lowest, 25 degrees. Maximum temperature for November, 61 degrees; minimum, 32 degrees.

The earliest seeding of winter wheat (September 12) probably will not germinate. Examination of the kernels indicates that most of them have rotted.

Some increase plats remain to be sown and also a small winter grain nursery. This will probably be finished next week. Grain sorghums have been cut but not thrashed. There will be but few to thrash, broomcorn and one or two of the kafirs being the only varieties that matured seed.

The November rains, all of which have soaked in, have made conditions much more favorable and farmers are busy seeding.

CALIFORNIA:

Biggs Cereal Field Station. November 15. The rainy season is in progress and has interfered with field work, construction work, and the harvesting and thrashing of rice. Only a small portion of the rice on the Moulton Ranch at Colusa has been thrashed, but good yields are reported.

November 25, 1912.

The cowpeas grown as a green-manure crop have been plowed under. As soon as the weather permits the work of constructing ditches and levees will be begun preparatory to rice planting in the spring.

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MAR 9 - 1913

NEWSLETTER

OF THE

OFFICE OF CEREAL INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

DEC 14 1912

Volume IV

1913

December 16, 1912.

BUREAU MEMORANDA

Memorandum for Heads of Offices No. 22.

November 18, 1912.

Gentlemen:

Relative to attendance of officers and employes of the Department at meetings, it will be necessary to give careful consideration to every case that arises, and before action is taken or promises are made the Chief or Acting Chief of the Bureau should be consulted. Generally speaking the expenses of travel for attendance at meetings, where such attendance will be in furtherance of the legally authorized work of the Bureau, may be paid from the appropriations for the Bureau. Many requests are received, however, from colleges and schools, chambers of commerce, horticultural societies and similarly organized bodies for lecturers on various topics. In the majority of such cases the traveling expenses for attendance at such meetings should be borne by the organization requesting the lecturer and not by the Bureau. Where the addresses to be given relate to the work of the Bureau as authorized by law, permission will generally be given to attend without other expense to the organization making the request than for travel and subsistence, the salary of the lecturer being paid by the Bureau while making the trip.

Very truly yours,

(Signed) B. T. Galloway,
Chief of Bureau.

Memorandum for Heads of Offices No. 24.

November 18, 1912.

Gentlemen:

For your information I quote below a letter addressed to the Auditor for the State and Other Departments by the Acting Secretary of Agriculture, same showing the Department's interpretation of General Order No. 158 in the matter of a per diem allowance in lieu of subsistence for the fractional part of a day:

December 16, 1912.

"Department of Agriculture
Office of the Secretary
Washington

October 24, 1912.

To the Auditor
for the State and Other Departments.

Sir:

Referring to General Order No. 158 of this Department, copy inclosed herewith, in the matter of a per diem allowance in lieu of subsistence, I beg to advise you that it was the intention to allow one-half of a full day's per diem where the fractional part of a day consists of one-half day or less, and where the fractional part consists of more than a half-day, to allow a full day's per diem, and the last paragraph of the Order is so interpreted in this Department.

Very respectfully,
(Signed) W. M. Hays,
Acting Secretary."

Very truly yours,

B. T. Galloway,
Chief of Bureau.

OFFICE NOTES

Mr. Ball delivered an address on the 12th instant at a convention of the National Broom Manufacturers' Association at the Sherman Hotel in Chicago, Illinois, his subject being "Some Problems in Broomcorn Culture."

Mr. Derr returned on December 10 from Chicago, where he was in charge of the grain exhibit displayed by this Office in connection with the United States Land Show from November 23 to December 8.

Mr. Morrison will be away from the Office on furlough from January 1 to February 28 inclusive in connection with the South Dakota Farmers' Institute work. He will take part in the judging of grains at the fairs held in connection with each farmers' institute. At the end of this time he will return to his station at Highmore.

STATION NOTES

LOUISIANA:

Crowley Rice Experiment Station. December 5. A precipitation (rain) of 4.34 inches occurred between

7:00 p.m. on the 3d and 5:00 a.m. on the 5th, as a result of which everything is pretty well flooded.

TEXAS:

Amarillo Cereal Field Station. November 30. Weather continues dry, and very mild for the winter season. Rain would be welcome so that plowing could be done. Fall grains are looking very well, but making little growth.

Mr. Ross expected to leave Amarillo on the 4th instant, to visit the experiment farms at Tucumcari, New Mexico, and at Dalhart, Texas, returning to Amarillo at the end of the week.

Rice Farm (Beaumont). Quite an extensive exhibit was displayed at the Southeast Texas Fair, and was well attended. Many farmers were interested in the station and expressed the intention of visiting it at some future date.

KANSAS:

Hays Branch Station. November 26. Snow fell for several hours on the 25th, covering the ground completely. Weather dry and fair on the 26th and slightly warmer. Mr. Kiene reports that he is still busily engaged on his annual report.

Mr. Kiene will make an official stop at Manhattan and take annual leave before his arrival at Washington, which will probably be during the first week in January.

SOUTH DAKOTA:

Brookings. December 12. Prof. Manley Champlin reports that the fall weather throughout the entire State has been decidedly unfavorable to winter grain. There has been no rain or snow, but high winds have been prevalent. Show fell at Brookings on the 12th, however, and it is hoped that the plats there will survive.

NORTH DAKOTA:

Williston Experiment Station. November 30. Weather still remains ideal with no snow. Thrashing is still in progress, but pretty well completed in this part of the State.. Farmers are busy hauling their grain to market.

It is reported that during the week of the 18th about four hundred loads of grain came into Williston from the surrounding country, some from a distance of 50 to 75 miles.

Mr. and Mrs. Babcock arrived in Washington on December 14.

WYOMING:

Cheyenne Experiment Farm. December 12. Prof. E. H. Watson of the State Farm Board in cooperation with which the new farm at Archer is being conducted, reports that Wyoming has been visited by a series of very severe blizzards.

COLORADO:

Akron Experiment Farm. November 30. Minimum temperature for the week, 2 degrees, on the 27th; maximum, 58 degrees, on the 29th. A light snow fell on the 27th probably about one-half inch.

All grain has been cleaned and partly stored away for the winter. Fall grains are in fine condition to go through the winter. It is reported that a few farmers in this locality are still sowing winter wheat. Most of the wheat in the vicinity of the station is looking pretty well, but some, having been planted late, has not made much of a showing as yet.

December 10. Weather has been very changeable this month. The maximum and minimum temperatures occurred on the same day, December 6-- macimum, 88 degrees; minimum, 2 degrees. High winds and considerable snow on the 4th and 5th, estimated at 1½ inches. At times the air was so full of snow that it was impossible to see farther than fifty yards in any direction. Owing to the high winds, however, very little snow settled on the fields.

Mr. McKee reports that he expected to leave for Washington on December 13, stopping en route at Manhattan.

IDAHO:

Aberdeen Experiment Station. Mr. Aicher will not make the trip to Washington this winter, but will have leave of absence from his station from January 13 to February 10, in order to participate in extension work in that section of the State.

CALIFORNIA:

Biggs Cereal Field Station. November 19. Weather is excellent and the prospects are that it will condinue so for a few days. The plowed ground is still wet as far down as the hard-pan from the heavy rains. It is drying slowly and some time must elapse before it can be worked. Unfortunately, there are heavy volunteer crops of wild oats and burr clover on the plowed ground, and unless it

can be double-disked soon it will probably need to be replowed in the spring. If double-disking becomes necessary, it may be possible to do it before the land is in condition for ditching.

A telephone has been installed at the station.

November 23. Weather is almost ideal, but the ground is still wet and very little field work of any nature has been accomplished during November for this reason.

Thrashing of rice is in progress in this vicinity.

November 29. Ground is now dry enough to work and is being double-disked after plowing to eradicate the volunteer growth. If the weather continues dry, ditching will probably be started about the middle of next week.

Thrashing of rice in the vicinity is nearly completed. Much interest is being taken in rice growing, as phenomenal yields are being reported. If the weather continues favorable, during the winter and spring, a considerable acreage will be planted to rice in the spring of 1913.

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